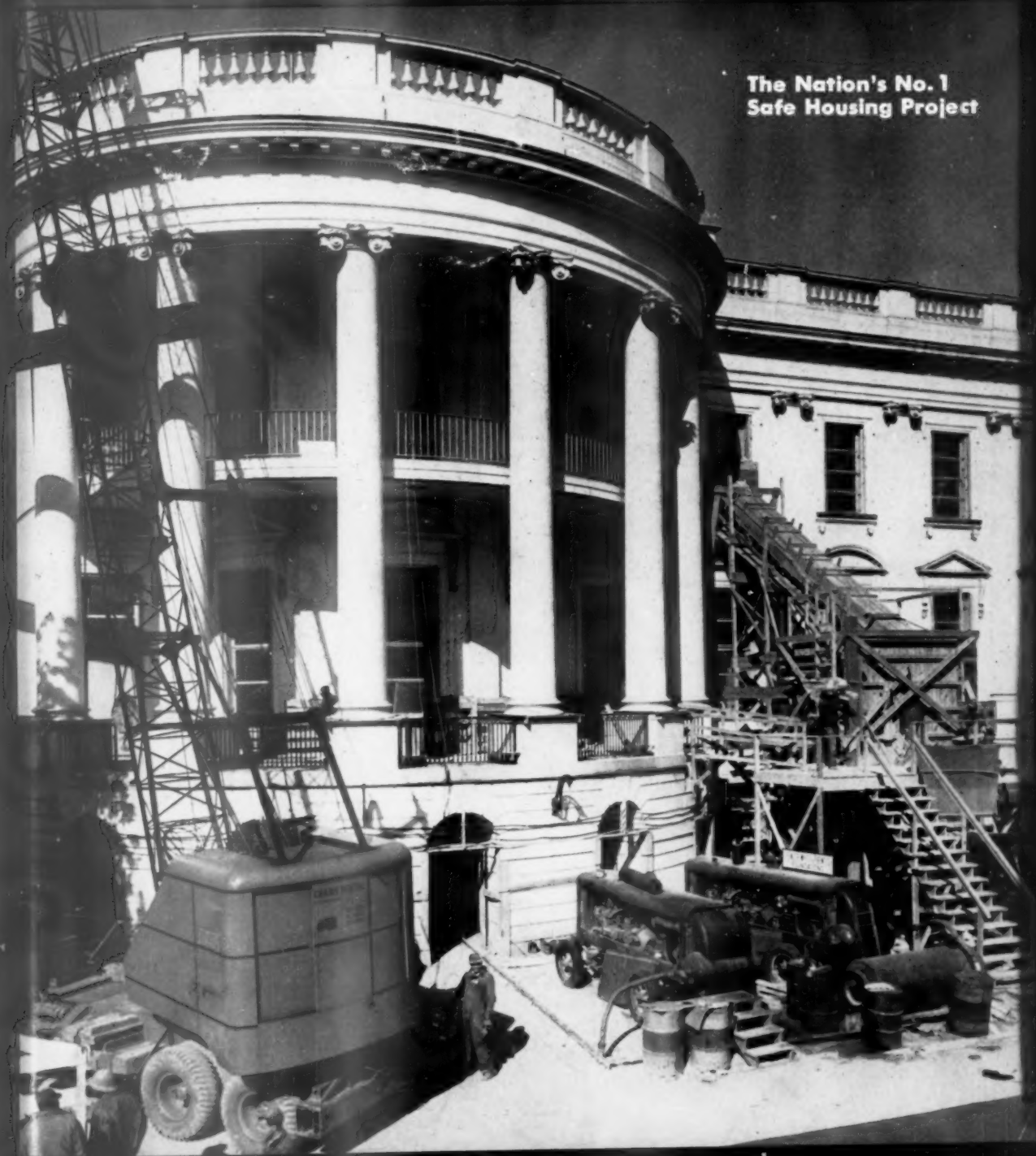


National Safety News

JUNE 1950

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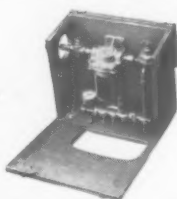
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For your convenience, Willson distributors in 61 cities are listed on page 114.

National Safety News, June, 1950

NATIONAL SAFETY NEWS



Published monthly by the
National Safety Council

JUNE, 1950

Vol. 61, No. 6

THE COVER: South view of the White House while reconstruction work is in progress. (Photo by Abbie Rowe, USNPS.)

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In This Issue . . .

THE AURA of tradition which has surrounded the White House for a century and a half has obscured the fact that the building was becoming increasingly unsafe. Work now in progress will preserve the traditional appearance of the Executive Mansion while bringing it up to date from the standpoint of safety. And while the contractors are making the historic structure safe for its occupants they are also observing necessary precautions for protection of the workmen on the job. (Page 18.)

Principles of fire extinguishment remain unchanged, but the protection of life and property has become more complicated with the expansion of industry and the introduction of new processes. Here is a summary of recent developments in fire control. (Page 21.)

Inspections are part of the safety routine in most plants, and too often, unfortunately, they are just routine affairs—perfunctory and unproductive. Here are some suggestions for getting more out of them. (Page 24.)

Like inspections, safety meetings can be either productive or time wasting. In this month's *Industrial Safety Panel* ten members tell their experience in planning and holding meetings. (Page 26.)

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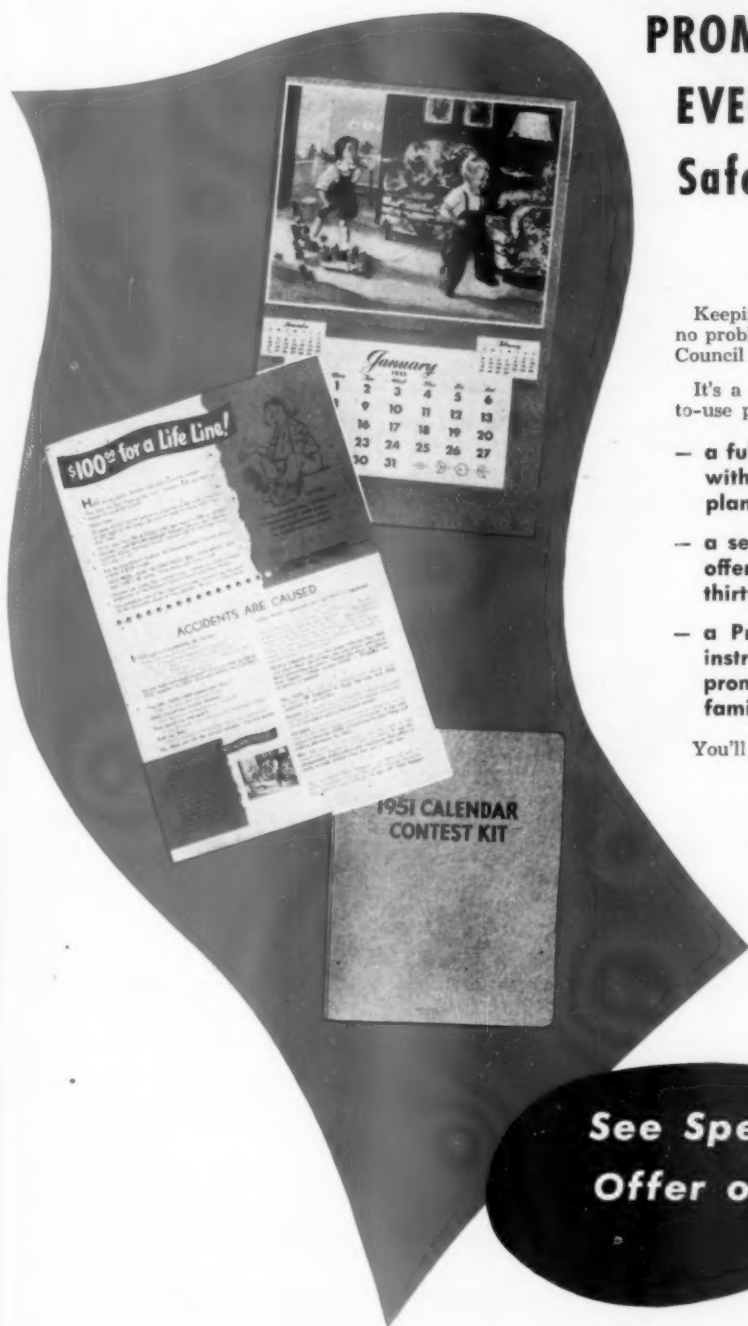
It's a complete year-'round promotion in one easy-to-use package that includes:

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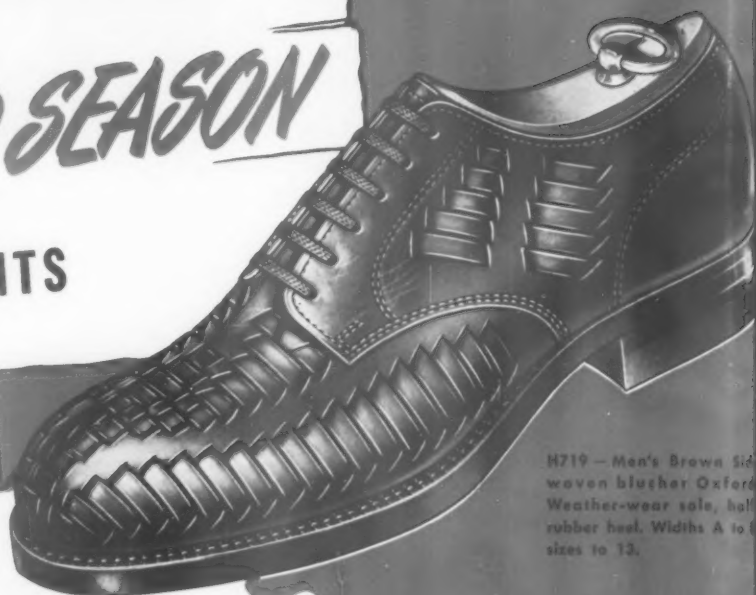
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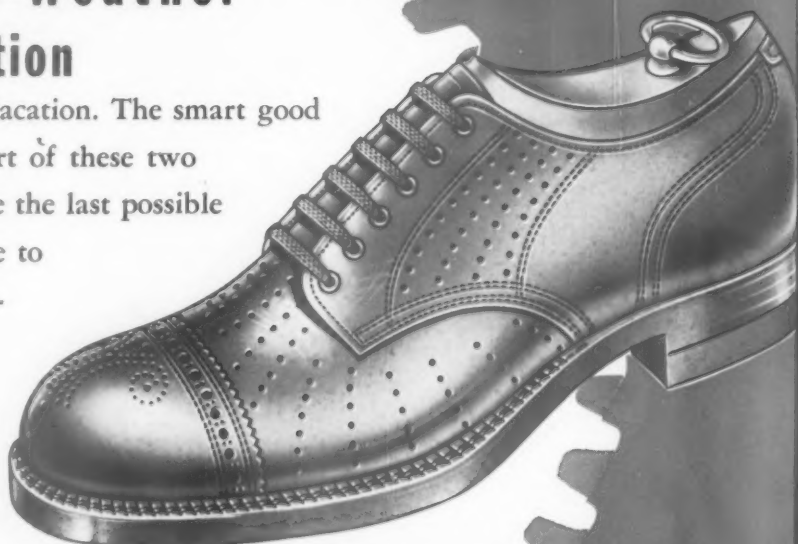


H719 — Men's Brown Side woven blucher Oxford. Weather-wear sole, half rubber heel. Widths A to E, sizes to 12.

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NATIONAL SAFETY NEWS

JUNE, 1950

Come and See Us!

I WRITE this in an atmosphere redolent with paint. I can look across a phalanx of desks to where industrial safety engineers are trying to work while tile is being laid almost at their feet.

Off to the east, the quiet of the library is but an unhappy memory, shattered by the clang of steel on steel as workmen erect the shelves for the world's best safety library.

Electricians and carpenters are enormously complicating the computations of our statistical division. And we are weighing the problems created by the fact that fixative from the artists' drawing boards is wafting across the desks of most unsympathetic editors.

There is something very domestic about this scene. The National Safety Council's headquarters offices are going through all the woes of an oversized family moving day.

To those of you who have dropped in to see our new offices in their first days, we already have offered apologies for the inevitable confusion. But to those of you who accept our cordial invitation—herewith tendered—to visit us from now on, we think we can offer better hospitality than ever before.

Our new headquarters at 425 North Michigan Avenue occupy the entire fifth floor of the big Mandel-Lear Building. Actually, the building sets back a half block from Michigan Avenue, but it connects directly with the Avenue's upper level by an elevated walkway.

We have undertaken a complete remodeling job of the interior of our floor—a substantial capital

investment which will be recaptured in a few years by savings in rent.

I think you will agree that the job has been well done. What was once warehouse space has been transformed into a modern, well-designed, efficient, attractive office. Ventilation, lighting and sound-proofing have been built in, with results superior to those found in our old offices.

Facilities for conferences, committee meetings and other group sessions have been expanded and made more flexible. In place of a single small conference room, we have three meetings rooms with folding partitions so that they can be thrown into a single large room.

Our increased floor space—about 50 per cent more than we had before—permits expansion and improvement of our stock, shipping and printing facilities, while bringing them together on a single floor.

We had hoped to be able to show you pictures of the new headquarters in this month's NEWS, but we are still a bit too involved with contractors to make our pictorial bow. However, the pictures will be forthcoming in an early issue.

I hope you will come and see us soon. The welcome mat is spread in our new reception room, and we are eager to show you the new homestead.

Ned H. Dearborn



Front view of the White House, showing construction access tower at the east end of the building and barricades around trees. (Photo by the author.)

Safe Housing

By ROBERT L. MOORE

At a famous address on Pennsylvania Avenue in the Nation's capital, workmen are transforming a historic but unsafe structure into a safe home for the Chief Executive and his household

AMERICANS, regardless of political affiliation, want the White House to be a safe, official residence for their President and his family. Many people must have been shocked when a report issued in 1948 disclosed that the executive mansion was in a highly unsafe condition for the presidential household and staff as well as for official guests and the thousands of visitors who come every year to see one of the nation's points of interest.

A Committee on the Renovation of the Executive Mansion, which included some of the best engineers and architects in the country, was set up, and in November, 1948, President Truman and his family were moved across Pennsylvania Avenue to safer quarters in the Blair House. The work of renovation is now under way, with the firm of John McShain of Philadelphia having the general contract, and Spencer, White & Prentis, of New York, having a sub-contract to do the underpinning, shoring, steel erection and basement excavation.

The Executive Mansion in Washington has been under repair many times since it was originally occupied by John Adams in 1800. In 1814 it was burned by the British and a downpour of

rain on the hot masonry the following day caused much spalling and cracking which can still be seen in many places in the outer walls.

A major repair job is now being done because the interior walls, which carry most of the load of floors and roof, have been slowly developing serious cracks due to unequal settlement in the underlying sandy clay stratum. Some parts of these walls have been settling faster than others because of irregularities in the clay on which the building rests and also because the interior walls have footings narrower than those under the less heavily loaded exterior walls.

Little settlement has occurred in the exterior walls, with the result that serious cracks at the joints between the exterior and interior walls have caused the internal support of the building to become weaker and weaker, especially where heavy third floor trusses bear upon gradually disintegrating brick walls.

Detection of these structural defects has led to this major job that will make the White House a safe place for years to come. But it must be remembered that the building did not become unsafe over night. It has not been really safe for many years—both structurally and from the fire hazard. The building was not fireproof and the emergency exits were inadequate.

The second floor, which has contained the living quarters of the President and his family, was never strong enough and for a long time has been deteriorating from gradual drying out and splitting of overstressed beams and joists which have been further weakened by cutting to install pipes, wires and ducts. It was excessive vibration of the second floor and its supporting members that led to the renovation project.

Americans feel close to the White House and they are interested in retaining its tradition. The commission is sparing no effort to retain this aura although it would have been much simpler

Workmen, wearing hard hats, handling muck bucket.



ROBERT L. MOORE is Senior Engineer, Construction Section, National Safety Council. Photos, unless otherwise indicated, are by Abbie Rowe, USNPS.

Project No. 1

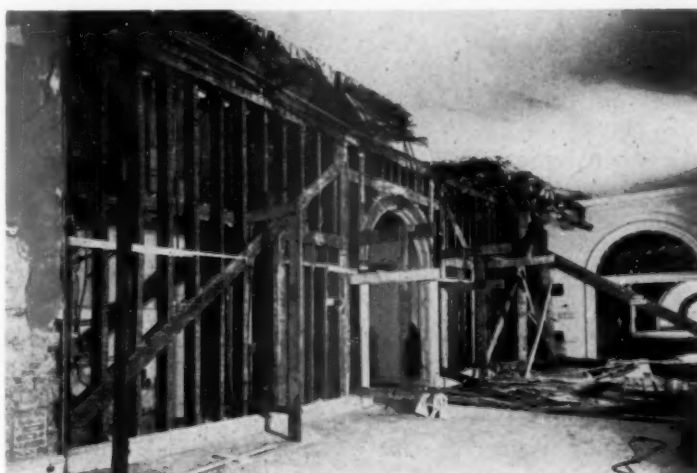
to take the building apart, mark the pieces and reconstruct it to the familiar appearance after constructing adequate footings and structural supports. However, it would not be the same building on which the Georgetown Free Masons and the Commissioners of Federal Buildings laid the first stone in the southwest corner on October 13, 1792.

The visitor to Washington today sees the same familiar exterior of the White House but a great deal of construction activity is going on. The south lawn is dotted with

Interior wall being demolished. House-keeping, always difficult during demolition, is good. Sign "Danger—Watch Your Step" has been posted and a fire extinguisher is kept on hand.

Preliminary underpinning excavation at the west end of the south front.

First floor of the White House, showing where a cupboard was formerly located. In some places the width of the remaining wall is only half the width of a brick. At the right are Mr. Houck and Mr. Russell of the John McShain Company. (Reni Photos.)

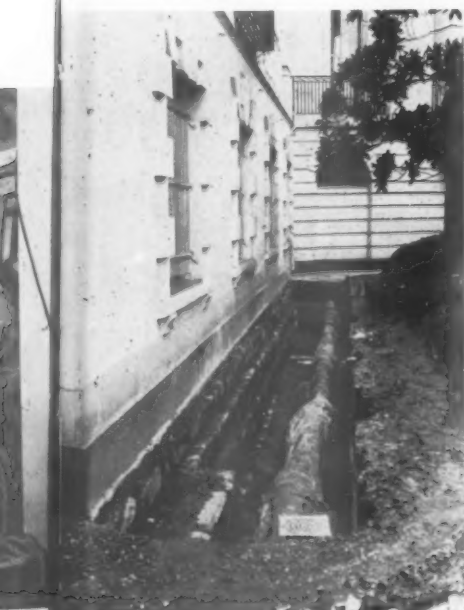


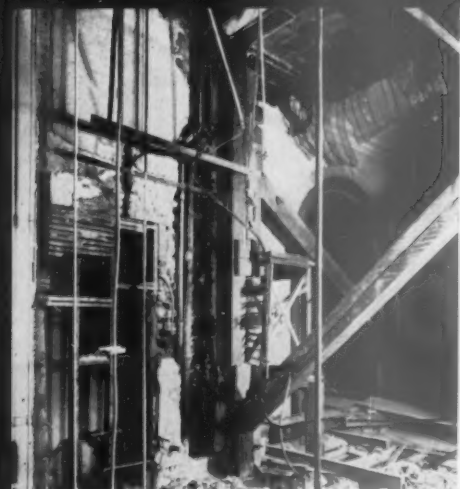
temporary storage and work sheds, contractor's offices, fences and barricades to protect the trees. The exterior of the building is only slightly changed. Window frames have been removed and sealed with building paper, a temporary wooden access stairway for all floors and the roof has been built on the east end, and a demolition chute, material hoist and temporary wooden access stairway have been built just east of the south portico.

While the contractors are busy making the White House safer for the President and his family, they are also concerned with the safety of the workmen on the project. A great amount of pre-planning had to be done to make sure the build-

ing would remain safe and stable during the various stages of the work.

The firm of Spencer, White and Prentis started the first of the underpinning of the outside walls about the middle of December, 1949, at the west end of the south side of the building. The underpinning of the exterior walls is in process around the entire building and on the portico pillars at the south side of the building. A systematic procedure for doing the underpinning was followed with the sections being marked on one of the drawings when the concrete was poured. Locations of the sections were predetermined by the contractor and were so located that they had one end at the centerline of each window open-





Deep chase cut in brick wall for installation of two pipes.

Standard railings, with top and intermediate rails and toeboards in course of construction around floor openings. Note good housekeeping.



ing and the other end approximately 2 to 2½ feet in from the window jamb measured along the wall length. Sections located this way assure proper transmission of the load down through the wall to the concrete underpinning. This is further evidence of the thought and planning that have been given to assure safety of the building and the workmen. Special treatment has been given at the corners of the building.

The depth of the underpinning varied with the depth below ground being from 26 to 30 feet. In the shafts ladders were installed for workmen to get to the bottom of the hole and planking was put over the top of the shaft to prevent rock and muck from falling onto the workmen. Hard hats have

been supplied to the workmen. Ladders were well constructed with cleats and spacers nailed into the side rails. Ladders were securely fastened to the timber cribbing in each hole, and sufficient light was provided to give proper working conditions. Muck buckets were provided with side locks to prevent accidental dumping, and new rope was provided for hoisting purposes.

While the underpinning was the most hazardous work in the initial phase of the job, there has been also under way an equally tedious job that involved the same degree of pre-planning. Since it was decided to retain the present steel third floor and roof supporting members, which were installed at the time of the last important re-

construction work in 1927, there developed a complicated job of shoring. One of the best methods for visualizing a system of shoring that is to be installed on any job is to build a small model of the shoring beams and towers. This procedure was followed and it really paid dividends. It gave a clearer understanding of the job to be done and it represents another approach to the problem of pre-planning for safety and efficiency. Top supervisory and field personnel found this model very helpful.

Periodic job safety meetings have been held where an insurance company safety engineer and the job superintendent discuss the


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Two sections of underpinning in place showing method used at corner.

Well-constructed ladder leading down into pit 30 feet deep.





*Water spray protection for working tanks of flammable liquids in chemical manufacturing plant.
(Tennessee Eastman Corp.)*

IN industrial fire protection it is, of course, our object first to prevent the occurrence of an unfriendly fire. Fire prevention is the foundation and the principal object of our attention, but like the industrial plant which provides an effective safety department to prevent accidents and then provides a good medical department to take care of the mistakes which do occur, so in fire protection we need to provide adequately for the unfriendly fires which sometimes find their way into our plants.

Fire control, itself, depends principally on good fire resistive construction to limit the spread of fire and to reduce the damage, but also must rely heavily on extinguishing methods.

While this discussion is devoted to new methods in extinguishing methods, it should not be forgotten that the most important fire-extinguishing device ever developed is still the automatic sprinkler. These various developments give us new fire extinguishing tools and means for handling new or unusual hazards, but there is not one of them which in any way decreases the importance of the automatic sprinkler backed by good construction as the main line of defense.

However, developments in extinguishing methods, many of them coming out of our experience in the war, have given us some new tools which are very effective on certain types of fire situations.

As in any period of rapid de-

ALLEN L. COBB is Director, Safety and Fire Prevention, Eastman Kodak Company, Rochester, N. Y. This article has been adapted from a paper presented at the Fire Prevention Session of the 37th National Safety Congress.

New Methods in Industrial Fire Control

Good construction and automatic sprinklers are still industry's most important defense against fire. New developments have provided additional methods of unusual hazards.

velopment, a certain amount of confusion is bound to occur. There may be a rush to new devices for purposes for which they are not suited. These may even add to the hazard, or they may give a false sense of security.

Realizing the necessity of giving attention to this rapid develop-

ment, the National Fire Protection Association a few years ago established a committee to review existing standards and to write new standards necessary for foam, carbon dioxide, water spray, and other new extinguishing methods as they were developed.

Last October this work was

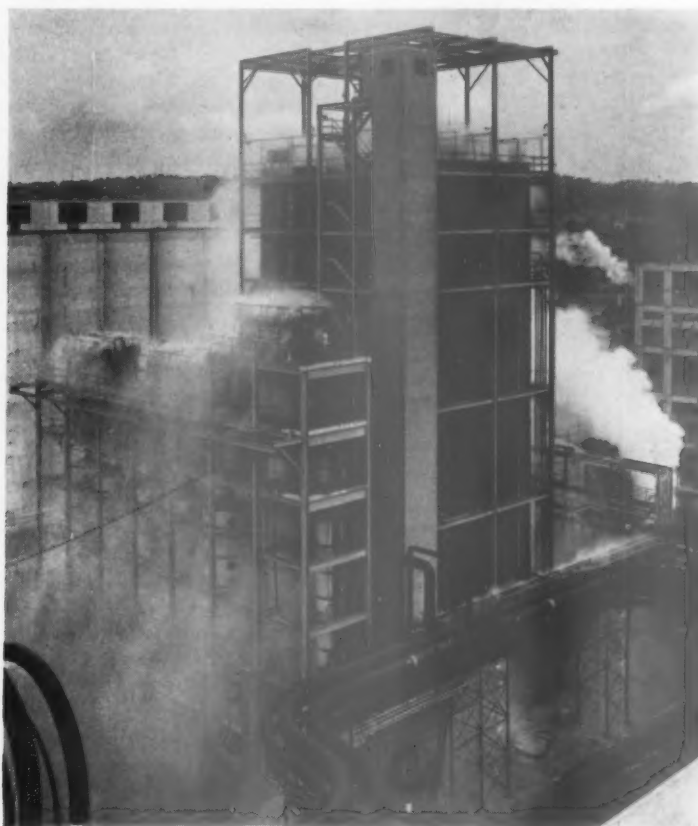
further expanded by the formation of the General Committee on Special Extinguishing Methods having under its jurisdiction six technical committees.

This group of six committees is charged with the development of standards for the use of all extinguishing devices and methods other than the basic automatic sprinkler and hose stream protection.

Being actively connected with the work of these six committees, it seems to me that a good way to take up these new developments would be by the fields of endeavor of each of these committees.

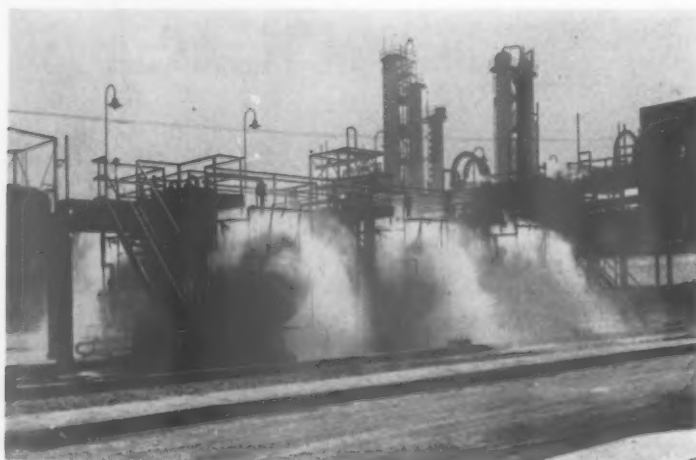
The Committee on Water Spray Extinguishing Methods, of which Carl J. Setzer of the Ohio Insurance Exchange is chairman, has developed rather extensive standards for the use of water spray in fire protection. Some of you may know of water spray by the term "water fog." Water Fog is the proprietary name of one manufacturer.

Early in the development of water spray methods it was believed that the water had to be very finely divided in order to provide a large surface area, thereby giving a very rapid cooling effect. Experience has indicated, however, that a very finely divided mist is very easily carried away from the fire by wind or thermal updraft and has very



Above: Water spray protection for reaction towers in a chemical manufacturing plant. (Tennessee Eastman Corp.)

Right: Tanks containing isobutane protected by water spray system. (Socony-Vacuum Co.)



little penetrating effect. In more recent applications a relatively coarse spray is used.

The action of water spray is very similar to that of the standard automatic sprinkler, extinguishing fire principally by cooling.

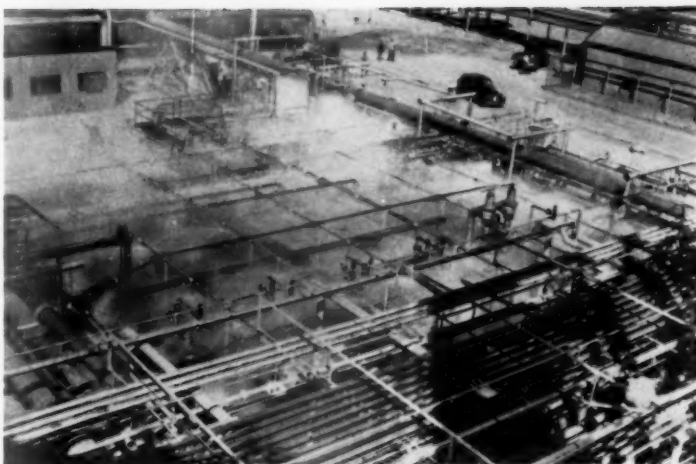
It should be noted that water spray, in addition to extinguishing a fire, may also be used to protect equipment exposed to a fire by thoroughly cooling it as a protection against radiant heat from a nearby exposure fire. Water spray is used also to control but not extinguish fire.

In the case of certain very volatile flammable liquids or with gas fires it is often much safer to simply confine the fire and to protect all equipment exposed to its heat than it is to actually extinguish the flame which might result in the release of a large quantity of flammable vapors which, on reaching a source of ignition, could easily cause a severe explosion.

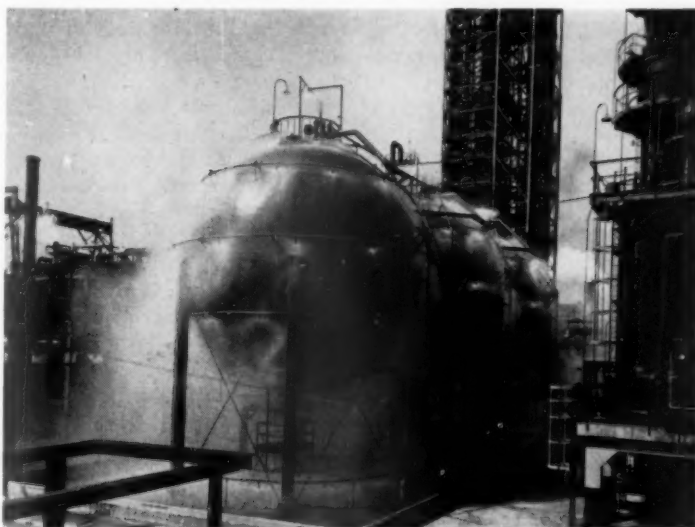
By the use of water spray a fire of this type may be controlled so that it does relatively little harm until the fire goes out either through the fuel burning up completely or the fuel supply being shut off in some manner. This is an extremely important use, particularly in the petroleum and chemical industries.

Water spray systems have

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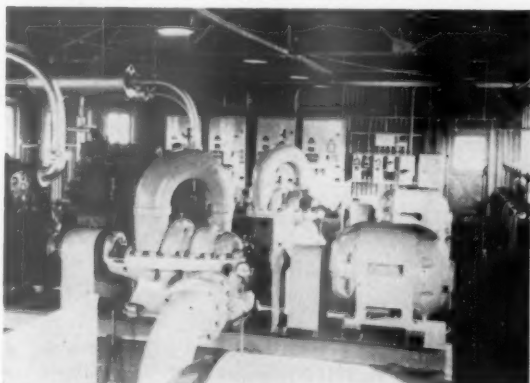


Automatic water spray system for flammable liquid piping in petroleum industry. (Phillips Petroleum Co.)

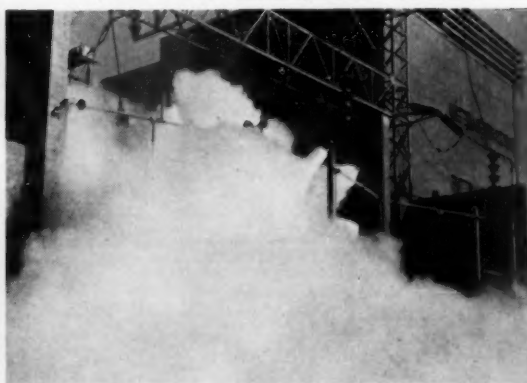


Water spray protection for spherical pressure tanks.

Pump house for foam system. (Hercules Powder Co.)



Low pressure carbon dioxide system for transformer.





Being a good listener is an important qualification for an inspector.

Inspections Are Opportunities

. . . And here are some ways of making the most of them.

By ROBERT CLAIR

PROBABLY 99 per cent of all accident prevention programs include inspections. They are taken for granted as a prerequisite to a successful program.

But let's ask ourselves some honest questions. How many of our inspections are hit-or-miss affairs without clearly defined objectives?

How many executives and members of accident prevention committees are being put to sleep by dry-as-dust inspection reports?

How many inspections are just sight-seeing tours — hand-shaking, back-slapping expeditions?

In short, how many inspections are unorganized or disorganized, and non-productive?

Probably we think we know all there is to know about inspections. Certainly, much has been said and written on the subject. You will probably recognize many of the ideas mentioned here. You may admit they are sound. But are you using them?

Experience is still the best teacher. Therefore, a careful analysis of accidents that have oc-

curred and a close study of statistics compiled from accident investigations are vital activities.

We must not lose the opportunity of detecting new or sleeping hazards that as yet have not caused serious accidents. Accident analyses, investigations and inspections are, therefore, closely related. They are complementary. One without the others does not give complete guidance for preventive effort.

1. WHY do we make inspections?

In general, to detect and identify specific conditions which have caused or may cause accidents and to report these findings. In addition, an inspector may be expected to suggest corrective measures for hazards which he observes. In such cases, a person with qualifications beyond those of an inspector may be required.

More specifically, we make inspections:

- a. To perform a regular constructive function of the accident prevention program.
- b. To reveal specific hazards, clues to which have been obtained from analyses of accident experience.
- c. To analyze new, seasonal or occasional operations—before they begin—to eliminate hazards in advance.
- d. To support and supplement special accident prevention campaigns.

e. To comply with requests for special assistance.

f. To further the accident prevention education of management, supervisors, employees, and the inspectors themselves.

As a final answer to this question, I should like to insert some brief advanced thinking. There are many accident cause factors which we do not yet understand. We are not familiar enough with them to recognize or control them. I should like to suggest this definition of an accident:

Failure of an individual's occupational effectiveness resulting in either personal injury or damage to equipment or material.

This definition should broaden our interests. Such a failure may be traced back to the mishandling or a lack of consideration of one or more factors that can influence the individual's occupational effectiveness.

Eventually, safety engineers must be familiar with all these factors.

2. WHO should make inspections?

Inspections may be made by any individual or any group of persons with adequate training, status, authority and responsibility. An inspector may serve permanently or rotate with others at regular inter-

ROBERT CLAIR is Assistant Vice-President, Liberty Mutual Insurance Company, Boston, Mass. This article has been adapted from a paper presented at the session on Maintaining Interest in Accident Prevention, 37th National Safety Congress.

vals. Rotation spreads experience and education and avoids staleness.

There is probably no one person in our profession who is able to recognize and measure all possible hazards. Therefore, one who can perform a complete inspection job is not likely to be found in any establishment. The person qualified to inspect one piece of equipment or one operation may be entirely unqualified to inspect another.

We must, therefore, know the qualifications of our inspector and we must define the objectives and scope of his inspections clearly.

For instance, boilers and other pressure vessels, cranes, hoists, elevators, chains and slings are considered hazardous equipment and their inspection and testing requires special knowledge and training. Where there are toxic or explosive substances in the form of dusts, gases, vapors and fluids

we need inspectors with specialized knowledge of methods and instruments for evaluating and controlling the hazards.

3. WHEN should inspection be made?

The time element is important. First, how long should it take to make each inspection? Second, at what time of the year should certain operations or equipment be inspected? Third, how often should inspections be made?

One conventional classification is as follows:

- a. *Periodic* — Inspections made at regular intervals, either of the entire establishment or of certain equipment or processes where the controls are especially sensitive or delicately balanced.
- b. *Continuous* — Usually conducted

Check lists are useful reminders for inspections, particularly when expanded to take care of local conditions. (NSC Safety Instruction Cards.)

by persons employed on a full-time basis who are responsible for the operations assigned to them.

- c. *Special* — Inspections made intermittently and, generally, applied as considered advisable or because of the appearance of some indicated need.

Dates for inspections may or may not be announced in advance; there is something to be said for both methods.

Multiple shifts should be covered by adequate inspection schedules.

An inspection calendar that schedules inspections six or twelve months in advance is essential to any complete inspection program.

4. WHAT should we inspect for?

There are many available ready-made check lists consisting of items which should be observed by an inspector and covered in

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PLANT HOUSEKEEPING

Check Card—General Conditions

Keep it clean and keep it orderly. CHECK:

- | | | |
|---------------------------|---|--------------------|
| FLOORS
AND
STAIRS | <input type="checkbox"/> Dropped objects picked up | |
| | <input type="checkbox"/> Scrap pieces in box | |
| | <input type="checkbox"/> Oil, grease spills wiped up | |
| | <input type="checkbox"/> Stock material out of way | |
| PILES | <input type="checkbox"/> Good foundation—straight sides | |
| | <input type="checkbox"/> Layers cross-tied | |
| | <input type="checkbox"/> Break-down from top | |
| AISLES | <input type="checkbox"/> Trucks | } not in
aisles |
| | <input type="checkbox"/> Hose and electric cord | |
| | <input type="checkbox"/> Ladders, boxes, etc. | |
| LOCKER
AND
WASHROOM | <input type="checkbox"/> Oily clothes and rubbish out of locker | |
| | <input type="checkbox"/> Floor dry and clean | |
| | <input type="checkbox"/> Newspapers, lunch scrap in waste can | |
| FIRE | <input type="checkbox"/> Flammable waste in covered can | |
| | <input type="checkbox"/> Fire equipment not blocked | |

(See other side)



SAFETY INSTRUCTION CARD No. 29

SAFETY INSPECTION

THESE are some of the things to look for when making a safety inspection:

1. Do men operate machinery, or use tools, appliances, or other equipment without authority?
2. Are they working or operating at unsafe speeds?
3. Have guards been removed, or have guards or other safety devices been rendered ineffective?
4. Do men use defective tools or equipment; or use tools or equipment in unsafe ways; or use hands or body instead of tools?
5. Do they overload, or crowd, or arrange, or handle objects or materials unsafely?
6. Do men stand or work under suspended loads, open hatches, or shafts, or scaffolds; or ride loads; or get on or off equipment or vehicles in motion; or walk on railroad tracks, or cross car tracks or vehicular thoroughfares except at crossings?
7. Do they repair or adjust equipment in motion, under pressure, electrically charged, or containing dangerous substances?
8. Does anyone distract the attention of, or startle, other workers?
9. Is there any failure to use safety devices or protective clothing?
10. Are there any other unsafe acts of persons?



SAFETY INSTRUCTION CARD No. 325

the industrial safety panel



Discusses

SAFETY MEETINGS

THE QUESTION:

*How do you plan and conduct
safety meetings?*

THE PARTICIPANTS:

ARTHUR BRADBURY, safety director, Inland Steel Company, Wheelwright, Ky.

JOHN J. BURGER, safety director, W. J. Dickey & Sons, Oella, Md.

R. W. CROUCHER, safety officer, Minnesota & Ontario Paper Co., International Falls, Minn.

H. V. GARDNER, safety director, Owens-Illinois Glass Co., Toledo, Ohio.

E. G. HUTZLEY, safety and fire prevention engineer, Campbell Soup Co., Camden, N. J.

D. A. KLEMME, safety supervisor, Stanolind Oil & Gas Co., Tulsa, Okla.

CHARLES A. MILLER, manager, Southern Division, Personnel Department, The Texas Company, Houston, Tex.

C. J. MUNK, safety engineer, The Racquette River Paper Company, Potsdam, N. Y.

J. HOWARD MYERS, director, Safety and Fire Prevention Division, The Atlantic Refining Company, Philadelphia, Pa.

GILBERT F. TYLER, safety superintendent, Pan American Airways, La Guardia Field, N. Y.

SUMMARY:

Safety meetings provide a valuable means of contact between management and employees on a subject of mutual interest. In many companies they form an important part of the accident prevention activities.

In this month's PANEL, ten members describe their methods of planning and conducting meetings for safety committees, departments, and other groups. All participants feel that these meetings are

helpful in conducting the safety program and in maintaining safety consciousness throughout the organization.

One member replied that safety meetings were rarely held in his company and that he did not feel he could contribute anything helpful to the discussion.

Most of the members have found training aids useful in conducting meetings. One, however, stated that discussion took so much of the meeting time that they seldom needed additional material. Most of these aids he considered too elementary for their use.

Importance of training chairmen was emphasized by one member whose company conducts training courses for them.

Safety meetings can be aided and spark-plugged, but not run, by the safety man, was another observation.

MR. BRADBURY:



Safety meetings of various types constitute an important part of our regular safety program.

General safety meetings are held each month for all employees. These meetings are held in the local theater on the second Wednesday of each month. Identical meetings are held during the morning for the night shift workers and in the evening for the men on the day shift.

Programs are varied and include a discussion of current accidents. Sometimes speakers are brought in to talk on safety subjects and at other times the programs are arranged so that the workers themselves provide the principal features. Added interest has been created by inviting groups of men who work together on underground sections and have established good safety records. These groups,

under the leadership of their foreman and with the help of the safety department, have provided some good programs by presenting a discussion of their own working problems.

After the business session has been completed, entertainment is usually provided by moving pictures or groups of entertainers.

Group or section safety meetings are held once a month on each section of the mine and are organized by the foreman who often serves as chairman. At some of these meetings the chairman is selected from among workers. Reports are heard from safety committeemen problems affecting the section are discussed and discussion material is furnished by the safety department. Members of the safety department arrange to attend several of these separate meetings each month.

Short meetings of supervisors are held each week at which time topics on safety and accident prevention are presented by some member of the safety department. The blackboard is often used at these meetings to assist in describing recent accidents.

MR. BURGER:



For quite a few years we have used two types of meetings, namely; supervisors and departmental safety meetings. Our supervisors' safety meetings are held monthly on the second Thursday of the month. This date was decided upon after making a survey of the men involved. In addition to all the supervisors in the mill, the following executives are also expected and do attend the meetings: president of the company, treasurer, secretary and mill superintendent. The value of this set-up is that everyone, whether in a supervisor's or executive capacity, knows what is going on and has an opportunity to contribute to the success of the meeting and the safety program. The subjects under discussion at the meeting will naturally vary from month to month.

However, some questions by their very nature are *monthly*, such as the safety record to date. From this we know what progress, if any, is being made. If an accident has occurred during the month, it is analyzed and literally picked to pieces by the group. Ways and means are then developed to be used as a preventive for this particular type of accident.

During the month an inspection of the mill has been made by a specially appointed inspection committee. Their findings are now made known to the group and also the action taken in the interim by management and the maintenance department. There may be some technical or otherwise difficult situation connected with the inspection. If this is

THE INDUSTRIAL SAFETY PANEL is an informal group representing various branches of industry. Each month part of its membership answers some question relating to accident prevention principles and methods. The Panel is conducted by mail and participants have no opportunity to compare notes.

The Panel includes personal views as well as expressions of company policy.

The limited sample of experience and opinion presented in the Panel inevitably leaves some angles of the subject uncovered. Comments of readers will be welcomed for publication by the editors, also suggested topics for future discussion.

the case, the meeting will afford an opportunity for discussion and solution.

Some aids that have been found useful are demonstrations with scale models and actual equipment. Visual education is thus brought into play and the members can see for themselves the correct and safe way to use the apparatus or equipment.

The departmental safety meeting is also held monthly and is a scale model, so to speak, of the supervisor meeting.

The subject matter of course will deal only with problems that are peculiar to the department in question. The departmental safety committee will function at these meetings with the foreman as chairman of the committee. By his attendance at the supervisor meeting he is well fortified with information and ideas so that the questions that arise will find a logical solution.

The safety director should have pertinent information readily available so that the meetings will move along rapidly and produce favorable results.

MR. CROUCHER:



In the course of accident prevention work in our four principal manufacturing plants during the last 13 years we have used about all the known forms of safety meetings. These have included simple departmental gatherings with shop talks and films, monthly meetings of supervisors on the foreman level, less frequent meetings of supervisors on the superintendent level, and monthly meetings of committees made up of both supervisors and workers. This last named is the form now being used.

The committees are composed of approximately two hourly workers to one supervisor. The aim is to have every department represented. Management appoints the supervisors, and the unions appoint the hourly workers. The personnel of the labor portion of the committees is changed periodically, the union sending a list to the company of the men

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SKIDS

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Although this data sheet was developed by the Printing and Publishing Section of the National Safety Council with particular reference to its own industry, the principles of handling skids, either loaded or unloaded, apply generally. Chief exceptions would relate to the heights to which loaded skids might be piled, because of the differences in weight and character of materials handled.

1. Injuries from the handling of skids constitute a chronic problem, one which contributes substantially to total injury experience if not kept under control. One printer, who has an effective safety program, reports that skid injuries still account for about 13 per cent of the total time lost because of injury in his plant.

2. The nature of the hazards will vary according to the degree of mechanized handling of loaded skids, as well as to the amount of paper used in the plant. The smaller plant may not find it feasible to provide the special handling equipment required by the larger organization.

3. Skid injuries are difficult to control unless careful job instruction is given. Like housekeeping, the prevention of skid injuries must largely depend upon job training, supervision, and control of unsafe practices.

Types of Injury

4. The most common types of injury from skids are caused by nails, splinters, and metal strap. Foot injuries and back injuries are likewise common, the former from dropped skids and the latter from one-man handling and incor-

This Data Sheet is one of a series published by National Safety Council. It is a compilation of experience from many sources. It should not be assumed that it includes every acceptable procedure in its field. It must not be confused with American Standard Safety codes; federal laws; insurance requirements; state laws, rules and regulations; and municipal ordinances. Reprints of all Data Sheets are obtainable from National Safety Council.

rect lifting. Employees likewise sustain injuries to shins, ankles, and feet from striking against open ends, against overlapping deck boards, and against the channel iron of steel foot skids. Eye injuries are suffered from flying strap end.

5. Of major concern are unskilled handling and stacking of loaded skids and loading and stacking of empty skids. Tiered skids of paper are not so stable but that a jolt against the side of a skid can cause a runner to collapse and the load to topple, with consequent risk of serious injury to employees.

Definition of Terms

6. The term "skid" in the printing and publishing industry commonly means a unit formed of wood runners on top of which is nailed a wood platform. Some operators think of the runners as the skids, with platforms detached and handled (as empties) separately. These printers call the combined runners and platform a "scow."

7. Printers who use separate runners and platforms for work

in process do so because they believe that runners and platforms lend themselves to one-man handling and to more compact and safer storage. The skid (or scow), on the other hand, comes with the shipment of flat paper, and is preferred in many plants for processing work because it is only one item to handle. It does require two men for safe stacking, however, and unless such skids are placed one up and one down, the stack can crowd aisle space and become top-heavy.

8. For purposes of this data

SKIDS

Removing from Freight Cars

1. Make sure dock plates are secure before you enter the car with the truck.
2. Wear reinforced leather gloves, safety shoes, and safety glasses, preferably with side shields.
3. Remove blocking and bands from the car. Loop draped straps under the anchors or cut them off close and bend sharp points under.
4. Clean the floor of nails, blocks, or other objects which could deflect a truck wheel.
5. Cut banding strap close to a binding point. Hold the "free" end with one hand while cutting, and stand to one side.
6. Knock the end board off the face of the skid and put it into an empty skid box or truck. Handle all boards with gloves.
7. Pull nails, or drive them flush.
8. Balance the load securely on the truck. Do not damage the skid or the paper.



SAFETY INSTRUCTION CARD
National Safety Council

No. 771
PRINTED IN U.S.A.

Figure 1. Safety instruction Card No. 771 was prepared so that the employer can make instructions on the unloading of freight cars a matter of record for employees. The card can be used as the basis for a meeting with skid handlers on the subject.

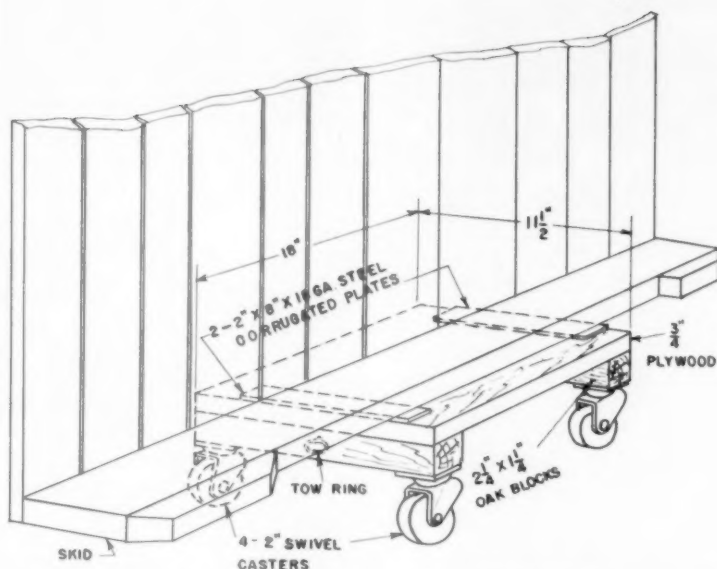


Figure 2. This easily constructed dolly makes it unnecessary for men to drag empties around the plant. The dolly itself involves a minor problem of "parking" and traffic control. (Courtesy Government Printing Office)

sheet, the term "skid" will follow the common use, meaning runners and platform as one unit. Mention is made later of metal foot platforms and disposable paper skids. The data sheet will not deal with hazards involved in the use of pallets, the double-faced units widely used in industry.

Unloading Freight Cars

9. Freight cars and adjoining work areas should be well lighted during loading operations. When men open a car door, they should use a car door opening device to avoid strain and to prevent injury from sudden release of the door.

10. Box car floors should be inspected for defects as the work progresses. Patched or weakened floors may not support the weight of a tractor wheel, and the operator is subject to injury if he is thrown against the tractor or the side of the car. The hazard of a pitched load due to floor collapse is particularly serious.

11. The following instructions to paper skid handlers will greatly reduce the risk of injury in the unloading of freight cars:

- Remove all blocking and bands from the car.
- Loop draped straps back under the anchors or cut them off close to the anchor. (Since draping is not always thoroughly done, some

operators consider it safer to cut the straps.)

- Knock the floor blocks loose, removing all nails from the freight car floor. Blocks, nails, and other obstructions can deflect the wheels of the mule or truck so that the handle of the machine may be jerked from the operator's hands and flung against his body, with resulting injury.
- Cut banding strap well down toward a binding point so that there is only one loose end to fly under tension. Stand to one side while cutting.
- Wear reinforced leather gloves to hold that loose end. For eye protection, wear hardened lens spectacles, preferably with mesh side shields. Wear safety shoes.
- Knock the end board off the face of the skid and put it either into an empty skid box or into a truck. If you use the lift truck to smash through the face board, remove the smashed board with gloved hands.
- Either pull out protruding nails and put them with the scrap or drive them in flush with the wood. Leave no nails either on or in the floor.

Unloading Trucks

- The procedure for unloading—To page 69

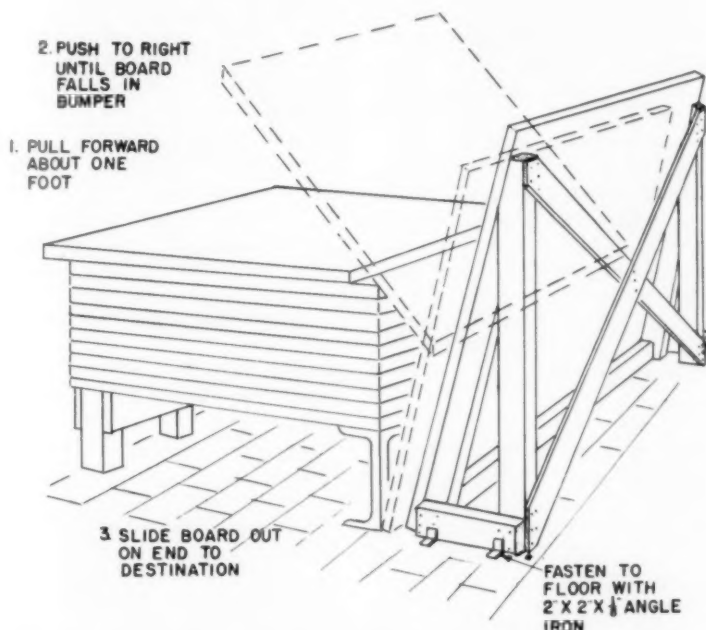


Figure 3. To reduce foot injuries, platforms can be pulled off a rack against an oblique backboard like the one shown above. (Courtesy R. R. Donnelley & Sons)



Concrete can be finished with a smooth or rough surface, depending on plant needs. Where light reflection is important, white cement can be used. (Austin Co. Photo).

Safety at the Floor Level

FACTORY floors must be designed and built to support heavy static and moving loads and the surface must withstand the continuous impact and abrasion of foot and wheeled traffic. In both construction and maintenance, the prevention of slipping and tripping hazards is an important consideration.

When a new building is designed, provision should be made for maximum loads. A factor of safety of at least four is necessary for static loads and six for moving loads. An ample margin is necessary because stored material cannot always be distributed evenly and because floors and their supports may deteriorate from dry rot, corrosion, splitting of timbers, or acid attack.

Wind loads and earthquake loads are also factors to be considered in some parts of the country.

Machines which induce vibration, such as printing presses, power hammers, punch presses or conveyors, cause added strain on the floor structure. Vibration can be minimized by installing continuous beds extending from beam to beam.

Vibration can often be reduced by mounting machines on beds of rubber, cork or other resilient

material to isolate them from the rest of the structure. Heavy machinery may require special foundations or floor reinforcement in addition to cushioning.

With the floor structure adequate to carry the loads that may be imposed, the safety engineer's concern will be a floor surface that will most nearly meet the requirements of operation and safety. The choice of flooring material will usually represent a compromise of requirements with due consideration of the cost.

Durability, plus economy of maintenance and repairs, are always important. Floors which develop cracks and ruts under normal traffic will be a constant source of hazard and expense.

A floor which has a naturally slippery surface, or one which becomes slippery on contact with materials to which it is exposed, will also be a continual source of grief.

Noise is something to be avoided. It is a source of fatigue and annoyance to employees. Some types of flooring which have excellent wearing and anti-slip properties are objectionable from this standpoint. Rubber mats on some types of flooring lessen the noise and protect the surface.

Where liquids may spill or

daily washing is necessary, the floor should be impervious and drains installed. Floors should be properly pitched to facilitate drainage and prevent leakage to the floor below. Normally a slope of $\frac{1}{8}$ inch per foot is satisfactory but where cleanliness is of prime importance as much as $\frac{1}{4}$ inch per foot may be desirable.

For industries such as dairies and other food products plants, it is necessary for hygienic reasons to install a smoother floor than would ordinarily be desirable. Under such conditions extra caution is needed, with prompt removal of all spilled material.

And, if circumstances permit, the floor should also be low in heat conductivity, dustless and resilient.

Darkness accentuates hazards under foot. All floor areas should be well lighted.

Floor Materials

There isn't any perfect all-purpose floor material—at least there is none available at moderate cost. There are, however, serviceable materials for a wide variety of industrial uses and many flooring specialties with more limited applications. Many of these marketed under proprietary names and the manufacturers offer help on flooring problems. Such assistance is often helpful in operations where the materials used have a deteriorating effect on the more common materials.

Of the types of flooring materials available, concrete and asphalt are the most widely used. Both are resistant to moisture and may be used for heavy duty service indoors and out.

A concrete floor should be of good quality. A weak, friable

surface will dust and crumble under impact and abrasion and no treatment will help much. If the mix and workmanship are reasonably good, one or more coats of a surface hardener will be effective in preventing dusting.

Concrete floors may be finished in several ways. Floor sealers provide a serviceable anti-slip finish or the surface may be coated with ordinary floor enamels or those with a rubber base which are especially adapted to use on concrete.

Finishing concrete floors, stair treads and landings to a polished surface is highly hazardous. An abrasive should be worked into the surface of stair treads and other areas where a non-slip surface is important. For such locations strips of abrasive-coated fabric may be applied or abrasive paints can be used.

Sometimes the objection is made that concrete floors are too hard or too cold. These objections are most common when men must stand in one spot for long periods; less frequently from men who move about in their work. Insulating boards, duck boards and resilient non-slip mats overcome these objections. To avoid tripping hazards, mats should be inset flush with the floor if possible, or installed with bevelled edges.

Asphalt is a useful flooring material with many desirable qualities. It is available in the hot mastic and cold mix asphalt emulsion types. It is comfortable underfoot, dustless and easily repaired.

In general, asphalt is not affected by acid or alkali. When damage occurs it is usually due to the aggregate in the mixture rather than to the asphalt itself. An asphalt mix containing limestone would be affected by most acids while siliceous aggregate would be unaffected.

The ordinary commercial grade will soften in hot weather and is not recommended for heavy industrial trucking. Harder grades of asphalt will remain firm up to 158 degrees F.

Asphalt emulsion flooring is laid cold about $\frac{1}{2}$ inch thick. It can be laid over a wood or concrete base. The surface is somewhat harder than the hot mastic type but if subjected to heavy traffic it should be laid over a substantial, rigid base.

All types of asphalt are softened by oils and organic solvents.

For some locations checkered steel floor plates have decided advantages. They wear well and are relatively non-slippery unless covered with oil or worn smooth. They are easy to clean.

When repairs are necessary plates can be changed easily or re-roughened by using suitable drill points or by welding beads of metal to the surface.

On the other hand, metal floor plates are noisy and highly conductive of heat and electricity.

Metal grille floor and grating are satisfactory. Types on the market have a non-slip surface and are useful on fire escapes, stairways, catwalks in boiler rooms and over floor openings. They do not collect dust, dirt or liquids. They are not suitable where trucking is done regularly.

Patent metal floors, such as those with lead inserts in a cast iron base, have good wearing and anti-slip qualities. Repair or change of plates is not difficult. Like all metals they are conductors of heat, electricity and sound.

Wood blocks provide a serviceable heavy service floor for many industries. Such a floor is comparatively noiseless and stands up under traffic if laid on a rigid base. Blocks can be replaced economically.

Wood plank floors are satisfactory for commercial and light manufacturing. If subjected to heavy trucking they will require constant repairing.

Ceramic tile is used where oil, alkalies or acids are present. Glazed tile is also used in specialized locations, such as dairies, where extreme cleanliness is important.

Rubber is normally resilient and has a high dielectric strength. With abrasive incorporated it is

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What happens when a wood plank floor is subjected to heavy truck traffic.



Maintenance of large areas of floor is facilitated by several types of floor machines. In the above photo, a wood block floor is being renovated for new occupancy. Drum-type machines with scarifying attachments or wire brushes loosen accumulations of dirt and a power sweeper follows to pick it up. (G. H. Tennant Co.)

You Must Sell the Boss ... But How?

By JOHN V. GRIMALDI

SOME years ago, according to a story I heard, the University of Michigan's football team was visiting a rival at a time when Michigan's opposition was granted a chance to win. The renowned Michigan coach, "Hurry-up" Yost, was giving his players a fight talk before they took to the field. The scene was the locker room. Yost's persuasive powers when keying up a bunch of boys to fever enthusiasm for their Alma Mater were not diminished that day.

For many minutes he spoke, emoted, and influenced, then concluding he pointed to the door and said, "Now tear out there and outplay 'em, fight 'em, beat 'em." The team as a man jumped to its feet, blindly eager to get at the opposition. They piled through the door, then suddenly disappeared. Yost had pointed to the door leading to a newly completed swimming pool. Persuasiveness such as Yost's, that so completely dominates, is an unusual quality. But successful selling, fortunately for most salesmen, does not require such ability.

I had the good fortune to work for a number of years as a salesman during the pre-war depression. Sales competition was lively. It has occurred to me since that the same methods successful in promoting a manufactured product should be useful in selling the values of safety. Are not the

problems the same? To start at the beginning, selling is nothing more than educating a prospect to the advantages of what you have to offer. That may be turbines, automobiles, electric toasters, loss reduction, or yourself. The first step in every case, is to draw the prospect's interest. This is fundamental in successful selling.

However, the attracting of interest is more easy in some cases than others. Many things because of their very nature have immediate appeal. For example, how often is a pretty girl at the beach unnoticed? But other subjects must be made appealing. They run the broad range from those which the public always has a particular interest in and would like to buy—such as automobiles and new homes—to those which people are inclined to ignore. Safety may be considered as an example of this last group.

Sales people know that there is almost nothing which has the interest-drawing power of a pretty girl, with the exception of money and children. And so, these "attention getters" constitute the successful advertising and sales approach. Thumbing through the advertisements of any magazine would substantiate this.

The use of attention getters which have an almost universal appeal is important and necessary. If a mathematical relationship could be formulated which would consider all the variables that are concerned with the behavior of people, the one common denominator would be the fact that people always tend to concern themselves with whatever is closest to their hearts at any given moment. In other words, people's

thoughts and acts are dictated by their interests. Therefore, since bosses are people—even though sometimes they may act so that you would doubt it—in order to sell them you must aim your sales approach at whatever interests them.

Unless you know of some different and individual weakness, it is reasonably safe, when selling your boss, to select one of the three "attention getters" as the foundation for your approach. Because his position requires a continued interest in the company's economies, identifying your activities with financial savings or returns practically guarantees success. There is no question that in order to conduct a safety program satisfactorily the boss must support the accident preventionist's efforts wholeheartedly. The executive is the one who influences the attitude of personnel. There is a saying in that the personality of the team reflects the personality of its coach. In other words a hard-working, hard driving team full of the will to win is a direct result of the coach's possession of these attributes. Similarly, the attitude of the plant's personnel towards safety can be no better or worse than the boss's.

The fact that safety specialists serve most frequently in a staff or advisory capacity demands that they become expert users of the successful sales approach. For even though their acknowledged expertness places them in the desirable advisory capacity, advice will not be taken many times unless it meets with the approval of the one who makes the decisions—the boss. This is especially so in instances where no immediate emergency exists.

To take a common place example, haven't you often noticed friends whose doctors advised the elimination of tobacco, or coffee or liquor, yet the advice was consistently ignored? The reason for

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JOHN V. GRIMALDI is Director of the Industrial Division, Association of Casualty and Surety Cos., New York, N. Y. This article has been adapted from a paper presented before the Selling Your Safety Program Session of the 37th National Safety Congress.

CAUSE AND CURE



These examples are from reports of actual accidents. They list the causes and the steps taken to prevent recurrence



Knee Hit

Electrician removing motor mounting used chisel to cut rusted bolts when hammer glanced off chisel, causing serious bruise above kneecap.

Correction: Workers were reinstructed in proper way to hold hand tools and were warned to take work positions that would not expose parts of body when tools slip.



Shaft Fall

Elevator repairmen moved cage to second floor level, leaving first floor doors open; woman failed to see small sign and fell into bottom of pit.

Correction: Posting of clearly-visible signs to warn public and positive barricades to keep curious away were ordered when elevator doors must be left open.

Coasting

Worker shut off power and reached across saw to get piece that had been cut off, but the coasting saw caused severe lacerations of his hand and arm.



Correction: Workers were warned firmly about keeping guards in place and about waiting for power machinery to stop coasting after power has been shut off.

Half Guarded

Tire plant worker lost tip of left index finger when it was caught between chain and sprocket wheel on side not protected by manufacturer's guard.



Correction: A complete check of the plant was ordered to determine need for adequate enclosures of power transmission equipment; proper guards ordered on new equipment.



Welding Fire

Sparks from an outdoor welding operation dropped two floors and entered wool dust collection room, causing fire that spread to other areas.

Correction: Welding and cutting rules were changed to require approval of foremen in affected areas, so that proper safeguards could be provided in each case.



Pinch Point

When a worker tried to skid an oil drum into a refrigerator room without assistance, left forefinger was caught between drum and door jamb and was mashed.

Correction: Workers were told to call for help when moving heavy objects, and were shown how to hold loads to avoid scrapes and bruises in narrow passageways.

Living With the Heat

Maintaining the body's temperature at a normal level involves both the individual and his environment

THE debilitating effect of high temperatures on the human body is well known. The remedies are also well known but their application is often complicated and costly.

In many parts of this continent, summer temperature alone may affect health and efficiency, while in many occupations the problem is aggravated by the heat produced in manufacturing processes.

The effect of high temperatures on the individual depends to a great extent upon his age and physical fitness. It may range from temporary discomfort to heat cramps, heat exhaustion or heat stroke.

Body temperature is the result of two factors—heat production and heat loss. Combustion of food within the body tends to maintain its temperature well above that of normal surrounding air. This is offset by radiation, conduction and evaporation. To maintain body temperature at its normal level of 98.6 degrees F., the heat production must be balanced by the heat loss. The body is supplied with heat regulating mechanisms and these function automatically in a healthy person.

In both hot and cold surroundings there is a constant interchange of heat between the body and its environment. There is the evaporative loss through the cooling effect of perspiration. The radiant loss or gain is from hot or cold objects not in contact with the body. There is also a convective heat loss or gain from surrounding air that is cooler or warmer than the body.

The human body has the power of adaptation to a limited range of atmospheric conditions. As

skin temperature and body tissue temperatures rise or fall above or below the point of maximum comfort, the adaptive mechanisms come into play. These are associated chiefly with sweat secretion in a hot environment and redistribution of the blood supply between the skin and deeper tissues in a cold environment.

Under extreme temperatures these regulating mechanisms fail and metabolism, or heat production by the body, rises. This means a failure of the regulatory processes. Up to this point, evaporation through perspiration has been sufficient. For moderately hot conditions, this will maintain a balance between heat production and heat loss although considerable discomfort may result.

When the surrounding temperature rises above that of the body, the evaporative heat loss becomes decreasingly effective. The radiation and convection factors add to the difficulty and the body temperature rises. When it goes above 106 to 108 degrees, life cannot survive.

High temperature has an injurious effect through diversion

of blood from internal organs to the surface capillaries to aid in the cooling process. This affects the stomach, heart, lungs and other vital organs. Persons performing physical labor in hot atmospheres lose considerable amounts of sodium chloride from the body through sweating. Cramps may result unless the salt is replaced through food or drinking water.

In studying upper temperature limits for work, many factors must be considered. These include the work, acclimatization of men to heat, their physical and mental fitness, diet and water and salt intake. Each of these factors may vary quite widely. It should be remembered that many industrial workers are not young nor at the peak of physical fitness.

For short periods, clothing may offer appreciable protection for men at rest. Resistance of clothing to radiation is affected considerably by its color. White and metallic surfaces are reflective and offer greatest protection against radiant heat from sun or furnace. Resistance of clothing to convection depends chiefly upon its thickness; and the weave is less important.

Air movement is important in increasing heat loss by convection and evaporation. The relief is obtained by removal of hot humid air from near the body surface and replacing it with cooler and relatively drier air. Tests have shown that air movement of 200 fpm will reduce the effective temperature of still air 1-2 degrees. Velocities of 500 fpm have been employed without apparent discomfort or ill effect.

General exhaust ventilation



helps to reduce the heat load where the heat source is spread over wide areas. In regions where high temperatures prevail for long periods, this system affords comparatively little relief.

When a source of heat is concentrated in a small area, local exhaust hoods may improve conditions. These should be insulated to prevent re-radiation.

Sometimes it is desirable to provide supply air instead of exhaust ventilation. The air may be taken directly from outdoors and it may also be cooled by water sprays. Piping should be insulated to avoid heating the incoming air. In some cases both exhaust and supply air equipment are used.

Water sprays on factory roofs will lower the temperatures inside by the cooling effect of evaporation. These methods will provide appreciable relief where complete air conditioning is not practical.

Large fans, known as "man coolers" are used frequently in such operations as wire drawing, glass manufacture, etc. These are set up in the vicinity of hot operations to direct a stream of air at the workers. Cooling may also be accomplished by directing streams of cool air downward from overhead ducts.

In many plants gases, vapors and excess heat are created by machines, furnaces, tanks, kettles and other equipment. These represent a definite health hazard which can often be controlled by vapor removal systems. These systems are particularly important where steam vapors form a fog which interferes with lighting and production.

Canopy type hoods of various designs are effective over kettles, forges, furnaces, steam rolls, etc. The lower the canopy and the more complete the enclosure, the more effective the control.

One of the most serious problems of temperature control has been in crane cabs. The operator is often exposed to gases, vapors and dusts as well as to high tem-

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NSC PROFILES

GUY L. NOBLE



GUY L. NOBLE is Vice-Chairman of the Board of Directors and Vice-President for Farms of the National Safety Council.

Mr. Noble was born in State Center, Iowa, on February 24, 1888. After obtaining his early education in local schools at State Center, he attended preparatory school at Washington State College and went on to earn his B.S. degree in agriculture from Iowa State College where he majored in dairying.

After graduating from Iowa State College Mr. Noble became associated with Armour and Company where he did public relations and experimental work from 1914 to 1921. During this time he contacted agricultural colleges and leading agriculturists throughout the country.

While at Armour's he was granted two patents, one having to do with the manufacture of oils and the other with an activated system of sewage disposal.

In 1921 Mr. Noble inspired the organization of the National Committee on Boys and Girls Clubs and the National 4H Club Congress. As managing director of this committee, which works in an

ex-officio capacity with the state and federal extension services, Mr. Noble has become nationally known for his leadership in popularizing and expanding the 4H Clubs.

It is through the National Committee for Boys and Girls Club work that the program of service to 4H Clubs has been developed. This includes among other projects a series of National 4H contests including one on farm safety, providing approximately \$150,000 in awards each year to 4H Club boys and girls. Mr. Noble has taken a leading part in securing the passage of legislation which has provided increased funds for the furtherance of 4H Clubs during the past 20 years.

In addition to his formal education as an agriculturist, Mr. Noble has had considerable actual farm experience in Washington, Iowa, Colorado, Wisconsin and in the province of Alberta, Canada. He now owns and operates a 200 acre farm in Lake County, Indiana.

In recognition of his contribution to the field of agriculture, he was awarded the degree of Master of Agriculture by Iowa State College in 1933. He was one of ten to be cited for outstanding service to 4H Clubs in 1941 at the National 4H Club camp.

In addition to his National Safety Council offices, Mr. Noble is a member of Rotary International and past chairman of the Youth Service Committee, Chicago Rotary Club; member of Saddle and Sirloln Club; member of Chicago Association of Commerce and past chairman of the Agricultural Council of the Illinois Committee; member of the Chicago Alumni Association, Iowa State College and past chairman and secretary; member of Chicago Farmers; member and former president of City Farmers Club of Lake County, Indiana.



"Pappy" John Gronbeck McCoy, chairman of the October Campaign Committee, and "Pappy" Clem Corey Hatfield, originator of the feud idea, pose for a cover picture for "Contact," the magazine of the New England Power System.

"Feudin'" Was Fun And It Got Results

By HUGH F. LOVERING

**There was more corn in the program
than in the jugs but there was a serious
purpose behind the clowning**

HOW CORNY can you get in accident prevention? This was the logical question asked many times last year by workers for the New England Electric System as they viewed new bulletin board displays or read the latest news on the progress of the second famous Hatfield-McCoy feud—actually a rather unique safety contest. It all started early in 1949 when Safety Manager Fred G. Harriman and his Gen-

HUGH F. LOVERING is Safety Engineer, New England Electric System, Boston, Mass.

eral Safety Committee were looking for something different to liven up the year's program.

The New England Electric System includes 38 operating companies, with large steam and hydro-electric generating plants. A 2,000 mile network of high-voltage transmission lines supplies local distribution centers in a 5,600 square mile area in five of the New England states. Twenty companies supply gas in relatively the same area.

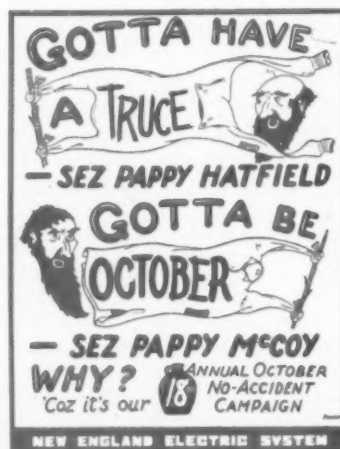
The General Safety Committee is made up of representatives of operating districts, production di-

visions and specialists from various departments of the New England Power Service Company. One of the most versatile members is the System's chief load dispatcher, Clement P. Corey, who thinks up original safety campaigns just as easily as he does plans for insuring service to 690,000 electric customers. The 1949 "Safety Feud" was his idea.

First, our 8,400 employees were set up in two clans, the Hatfields and the McCoy. Geography meant nothing; we just combined districts, divisions and construction forces regardless of location, until there were 4,200 in each clan. The System map showed Hatfield-held territory and McCoy-infested area set in like parts in a jigsaw puzzle. Yet every System worker knew the clan with which "he were a-ridin'."

From stories about the original West Virginia-Kentucky feud during the late 19th century came ideas for colorful titles and organization. Each clan was headed by

October campaign announcement poster declaring a truce between the clans.



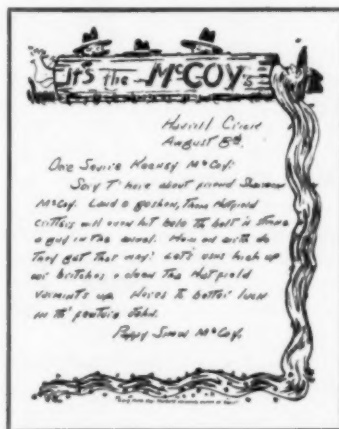
The authentic (?) hillbilly lingo was used in all communications, in challenges from one in-coming Pappy to the other, in pep talks to each clan and in bulletins. There



To keep System people informed the Safety Department at Boston got out a monthly bulletin called *Feudin' News*, giving the score to date and timely comment. (Column 1.) At each meeting of the General Safety Committee a convocation of the clans was held and the "Changing of the Pappies" was really something to see and hear—colorful in costuming and

The feud got under way, appropriately enough, on April Fool's Day. As the months passed, with cumulative lost-time frequency
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Letter from "Pappy" to "Squire" commenting on injury to one of clan.





(Fiction)

SOUND AND FURY

By BILL ANDREWS

June 2, 1950

I was sore—good and sore.

Two weeks ago the front office asked me to prepare a report on the work of the safety department. A similar report was requested from each department. I worked pretty hard on that report, closing with a number of the most essential steps we should take to continue our improvement.

Yesterday I asked Larson, my boss and our v.p. for manufacturing, what had happened to the reports. He growled, "See Bill Jordan."

So I went over to Jordan's office, wondering what he, as advertising manager, had to do with the report of the safety department. He seemed glad to see me.

"Glad you dropped in, fellow," he said. "I've been meaning to call you. That report was good stuff. Just what we wanted. I wish some of the other departments had sent in as good reports."

I asked him, "Does that mean that my recommendations were accepted?"

"What recommendations?" he said.

"The recommendations in the report."

He looked blank. "I dunno about that. But the report sure gave us good material for the brochure."

I didn't know about any brochure and said so.

Bill said, "Wait, I'll show you." He called one of his subordinates, and an eager young lad came in with some proofs of type and some drawings. With enthusiasm, Jordan told me about the fine promotional booklet the company was getting out. He pulled out the proofs of the material on safety. I read it and gagged. It started:

"There is no safer industry in the United States than Jackson-Barnes. There is no company that devotes itself more wholeheartedly to the welfare and security of its employees . . . etc., etc." It went on to catalog with fair accuracy the steps we have taken in our safety program, as outlined in my report.

"See," said Jordan, "we stuck to the facts as you gave them."

I kept on reading. At the end of my catalog of achievements was the statement, "From this beginning, Jackson-Barnes will march on. President Joseph Roscoe ('Joe' to his colleagues throughout the organization) has made the flat declaration that accidents in the coming year will be reduced 33 per cent."

I started bellowing. Bill Jordan looked hurt. "But this is based on your own material," he said. "What have you to complain about. This is a swell plug for safety."

I started in, as calmly as I could. Item One: we aren't the safest industry in the country, or even the safest company in our industry. We are substantially better than average, but not the best. Item Two: the statement that no company does more for the safety of its employees can't be proved or disproved, but it certainly has a patent-medicine ad ring. Item Three: the figure of 33 per cent reduction next year was based on a cumulation of several estimates I made in the report on the possible effect of specific changes recommended. Since no decision had been made to act on the recommendations, the estimate was nonsense, and even if it wasn't, it was the kind of estimate to keep in the family as a target, not to go bragging about before we accomplished any results.

Jordan just shrugged. "Joe has approved it. If you've got any objections, see him. He's the president, and I just work here. It still seems to me you're quibbling about pretty small details."

I took my troubles back to Larson. He could see my arguments, but he didn't feel there was anything he could do about it. "Everytime I go to see that Joe Roscoe with a gripe, he does a sales job on me. Either he convinces me that I'm wrong, or he makes me feel like he's putting me on the spot when he lets me try some-

thing. You go see him yourself. I've got headaches enough."

So I set an appointment for this morning. The hard chairs and the hard glares of Jackson's days are gone from the presidential office. I settled eighteen inches into the soft upholstery, lit a fifty cent cigar Roscoe shoved at me, listened to a really funny story. Finally Joe said, "What can I do for you, boy?"

I told him my tale of woe, and he frowned sympathetically. As I made my points, he nodded agreement. "Obviously," I said to myself, "I'm selling the master salesman." I finally put in my closing points—that we ought to completely rewrite the safety section of the brochure, and that he ought to consider the recommendations and act on them.

He still nodded. "I like your approach," he said. "You've made some telling points. I'll have Bill fix up the safety section in line with your suggestions." I started to get up, but I saw Joe had something more to say.

"Of course," he went on, "We'll consider those recommendations. Now let's suppose we can put half of them into effect, that would cut accidents according to your estimates say 15 to 20 per cent. So let's take 20 per cent as a reduction figure to shoot at. I like to establish quotas—they've proved their value in sales work, and as I've heard you say yourself, safety is about two-thirds a selling job."

I'm not quite sure I said that, and there still seems to me to be something fallacious in that reasoning even if I did, but I couldn't put my finger on it. "We're agreed, then," said Roscoe. "We rewrite the safety section, scale down the estimate, consider the recommendations. Swell."

And, floundering like a particularly stupid fish, I found myself out in the corridor, faced with the rapidly dawning conviction that Roscoe didn't know what I was talking about.

I couldn't trust myself to talk

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The SAFETY VALVE



At Home

By this time the NSC is settling down to work in its new home north of the Michigan Avenue bridge and alongside the *Chicago Tribune's* famous gothic tower. Since the president's editorial was written, the smell of fresh paint has disappeared, and the tumult and confusion have given way to something like order.

When we landed here on the morning of May 3 the situation looked bleak. Workmen were putting in acoustical tile and lighting fixtures overhead and asphalt tile under our feet. They were throwing together the steel shelves for the library with a great deal of enthusiasm and finishing the ducts for a ventilating system that ought to make Chicago summers less enervating.

At the spot where my number had been chalked on the floor was my desk and stuff I had packed and tagged before saying goodbye to 20 North Wacker. The only thing missing was the desk blotter and whatever was wrapped up with it—I can't remember what it was.

The first thing that hit me when I stepped into the new quarters was the vivid canary yellow walls. I had just finished painting a bedroom that color (not my choice, incidentally) and was beginning to hate it. But you can get used to almost anything.

We're treating ourselves to some of the things NATIONAL SAFETY NEWS has been recommending to readers. Miles of fluorescent lights are giving us more footcandles on our desks than we ever had before, without the afternoon sun burning our necks. Huge fans blow filtered air through overhead ducts, and we have fresh air without a breeze blowing the paper off our desks. The acousti-

cal ceilings are marvelous for soaking up the sound from batteries of typewriters and dictators talking into their dictaphones. And, we are told, the savings in rent as compared with a Loop location, will pay for these refinements in a few years.

The staff echoes Ned Dearborn's invitation to see us when in Chicago. The editors, artists, and allied craftsmen, in case you're interested, occupy a cloistered spot in the northeast corner, isolated by the Library's filing cabinets.

The Human Element

In any interpretation of the safety man's job you will find ability to get along with people listed in the front rank of qualifications. Often it is described not too accurately as "salesmanship." It involves liking people and having an amiable and tolerant attitude toward the assorted traits that make up the human personality.

William Feather tells of one executive who got along exceptionally well with his associates and was asked the secret of it. On paper, at least, the formula is amazingly simple.

The executive had noticed early in his career that men and women in business are essentially boys and girls in personality. They like to be praised when they excel at something, are quick to take offense at imagined slights, do best when things are explained to them, prefer to have responsibilities and duties definitely expressed, like to be regarded as regular fellows, and are all a bit jealous and unfair at times.

Carman Fish

Code Points Way to Safer Hospitals

IN some buildings used for hospitals, sanitariums, nursing homes and homes for the aged, conditions little short of appalling are being reported by building inspectors. Even the fundamentals of safety from fire have been found lacking.

Exit doors have been found locked. Corridors are found too narrow or restricted to permit rapid removal of patients. Inadequate exits and doors opening against exit travel are still being found.

Following disastrous hospital fires in the past year, safety measures for hospitals and sanitariums have been studied intensively, especially with respect to the application of nationally approved codes. Some of the results of these studies are now available in the new tenth edition of the Building Exits Code.

This safety code, developed under the guidance of the National Fire Protection Association, has just been announced as an American Standard. Based to a large extent on this and other ap-

plicable safety codes, a nationwide survey of hospitals has been initiated. A written report is to be made on every hospital, sanitarium, nursing home, and similar institutions in the United States. These reports are in the form of questionnaires with 133 major questions to be answered, many being a combination of several questions under one head.

The survey is being conducted under the guidance of the National Board of Fire Underwriters, where all reports are being consolidated, the American Hospital Association, and the Association of Casualty and Surety Companies, with 50 other cooperating organizations. From one and a half to two years will be required to complete the survey and prepare a report.

Among significant additions to the new code applying to hospitals are strong recommendations for horizontal exits and the provision of two or more compartments separated by smoke barriers or fire walls in both new and existing buildings. The latter is one means

of providing a horizontal exit, which means protected openings through or around a fire wall or a fire partition. Such an exit may also be one or more bridges connecting two buildings on the same level. Fire alarms and fire drills are also given more emphasis in order to be sure that hospital personnel at every level will be familiar with signals and procedure under varied conditions day and night.

With regard to horizontal exits, a new recommendation is that "In the planning of hospital exits it is essential that arrangements are made to facilitate the transfer of patients in their beds from one section of a floor housing patients to another section of the same floor separated by a fire wall or smoke barrier. . . . Where the building design will permit, the section of the corridor containing an elevator lobby should be separated from corridors leading from it by smoke barriers. Such an arrangement, where elevators are centrally located, will, in effect, produce a smoke lock, placing a double barrier between the area to which patients may be taken and the area from which they may be evacuated because of threatening smoke and fire."

Defining compartments, the new code states that "Each story in which 35 or more patients are housed shall be divided into at least two compartments by smoke barriers, and the enforcing authority may require stories housing a lesser number of patients to be divided into compartments when, in his judgment, such division is essential to the protection of the patients."

Minimum width of aisles and corridors requiring passage of beds has been increased from 60 to 96 inches for new buildings. However, 60 inches is still permissible in existing hospital buildings.

Hospital fire alarms and drills are defined more specifically in the new code, recognizing the dif-

—To page 102



Smoldering ruins of the mental ward of Mercy Hospital, Davenport, where 38 lives were lost in a recent hospital disaster. (Acme photo).

Reasons Why

THE Finnell DRY SCRUBBER

CLEANS FASTER... More Thoroughly

A unique combination of labor-saving features is responsible for the greater speed and thoroughness with which the Finnell Dry Scrubber cleans grease-caked floors.

Equipped with two powerful scarifying brushes, this Finnell digs through and quickly loosens the most stubborn coatings of dirt, oil, grease, and shavings—as the special couplings adjust brushes to floor irregularities, to get into indentations and grooves that rigid coupling brushes would pass over and miss.

To re-sharpen the brushes of the Finnell Dry Scrubber, simply flip the switch. That reverses the motion of the brushes and re-sharpens them automatically... while working. Eliminates the need for frequent changing of brushes by hand in order to maintain a good cutting edge.

Low construction makes it easy to clean around and beneath equipment, and the adjustable handle adapts the machine to operator's height for most effective working position.

Various types and sizes of wire scarifying brushes are interchangeable in the brush rings of this Finnell and, with other brush rings, the machine can be used for wet scrubbing, steel-wooling, waxing, and polishing. Ruggedly constructed. Has heavy duty G. E. Motor, oversize Timken Roller Bearings, special bronze worm gears, leak-proof gear case.

For consultation, demonstration, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 2206 East St., Elkhart, Ind. Branch Offices in all principal cities of the United States and Canada.

Reversible Switch
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Industrial Health

Highlights in Industrial Medicine, Hygiene and Nursing
Compiled by F. A. Van Atta, Industrial Department, NSC

Pneumoconiosis in Italy

Graphite Pneumoconiosis. By Luigi Parmeggiani. The British Journal of Industrial Medicine, 742-45 (January, 1950).

The observations in this paper were made in the Chisone Valley of the Piedmont where over 60 per cent of the graphite of Italy is produced. The figure given for the average composition of the commercial graphite produced shows about 56 per cent of carbon and 25 per cent of silica with approximately 11 per cent of free silica.

Dust determinations were made with the thermal precipitators and average values are given for the dust counts at various operations in the workings.

The mining operations show concentrations of 366 to 528 millions of particles per cubic foot. In the mills and the electrode plants the concentrations varied from 4.4 to 12.5 million of particles per cubic foot.

The clinical and dust counting investigations were carried out over the years 1946, 1947 and 1948 in five plants. A total of 415 workers were examined in the mines and mills. Nineteen and five tenths per cent of the miners and 23 per cent of the millers showed some pneumoconiosis.

The pneumoconiosis occurring in these places produced no physical disturbance except dyspnoea on effort. This becomes more apparent in more advanced cases.

The x-ray studies of miners in this area showed the pneumoconiosis develops quite slowly, commonly appearing after 14 or 15 years work either in the mines or in the mills. The x-ray picture typically shows fine reticulation which tends to become more dense with considerable work in the dust. Among the miners the reticulation appears to develop into a

fine nodulation after 20 to 25 years of continuous exposure yet appears somewhat oilier among the workmen employed in processing electrodes.

Tuberculosis as a complication appears to be considerably less common than it is in ordinary silicosis.

Antihistamines

Status Report on Antihistaminic Agents in the Prophylaxis and Treatment of the Common Cold. Anonymous. The Journal of the American Medical Association, 142:566-569 (February 25, 1950).

Since the antihistaminic drugs became generally available in 1947 there have been four rather extensive studies of their effect in the treatment of prophylaxis of the common cold.

These reports have covered over 2,300 patients, but more than half studied by a single observer.

In no instance has it been conclusively demonstrated that the conditions being treated were actually the common cold and over half of the cases have been studied in experiments with either no controls or inadequate controls. The evidence so far presented should accordingly be classified as the honest opinion of the investigators and not as established fact.

The role of histamine in the common cold has not been thoroughly investigated. Some of the early symptoms of colds have been reproduced by spraying of a dilute solution of histamine diphosphate onto the nasal mucous membrane. Further fundamental work is required before an interpretation of this fact is attempted.

The drugs used are not innocuous and there have been cases reported of individuals who have become drowsy or fallen asleep after taking the drugs. The effect of their continuous use over a number of years has not been thoroughly investigated at all.

Basic research should be done on their chronic toxicity.

Occupational Disease Reporting

Ten Eastern States to Participate in Study of Occupational Disease Reporting. anonymous, Industrial Hygiene Newsletter of the Public Health Service Volume 10, Number 5, May 1950.

The ten states, Connecticut, Florida, Georgia, Indiana, Michigan, New Hampshire, New York, South Carolina, Tennessee and Wisconsin, are cooperating with the Public Health Service in a two year experiment in the collection of occupational disease statistics by a uniform standard. The need for reliable statistics of this sort has been long recognized. It has been extremely difficult to fill the need because of the extreme variations in the reporting methods.

The participating states have agreed for the duration of the experiment to report on a uniform reporting form to be printed by the Public Health Service and according to a uniform definition of occupational diseases which has been agreed to in conferences between the Public Health Service and the various state agencies. In order to improve the utilization of the report forms the Public Health Service proposes to publish a pamphlet giving the background and purpose of the study and instructions for the use of the printed forms. These pamphlets will be distributed to practicing physicians, both in industrial and in private practice in the affected states.

Heads Gas Association Safety Committee

W. H. ADAMS, safety director for The Manufacturers Light and Heat Co. and associated Pittsburgh Group companies in the Columbia Gas System, has been appointed chairman of the Accident Prevention Committee of the American Gas Association. Mr. Adams was asked by Hugh H. Cuthrell, president of the association, to complete the unexpired term of committee chairman Paul L. G. Hasskarl who died recently.

WILL THIS COAL FEED THE WRONG KIND OF FIRE?

THOSE giant coal piles that stand next to power plants present little fire hazard in themselves. But when industry feeds its coal into pulverizing machinery to make a faster-burning, more efficient fuel, then sends it through ducts connecting pulverizers to storage bins—the picture changes! The fine coal particles ignite easily, burn fiercely—and flames inside the duct are almost impossible to get at.

That hazard is taken care of in a mighty effective way at the East River Plant of Consolidated Edison Company of New York—by a Kidde automatic extinguishing system.

If a fire breaks out in the duct, the system goes into action fast. Pressure trips operate to close the duct dampers... flame-smothering carbon dioxide (CO_2) pours through Kidde Nozzles directly into the duct. The flames are out in a few seconds—and the unburned coal stays dry, clean, ready for use.

It's in cases like this—where hazards are toughest—that Kidde skill counts *most*. It will pay you to bring your fire-protection problems to us.

Your local Kidde representative is probably listed in the telephone book.

When you think of CO_2 , call Kidde!



Kidde



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THE ACCIDENT BAROMETER

Prepared by the Statistical Division, National Safety Council

Accidental deaths in February totalled approximately 6,400, a decrease of 4 per cent from the death total for February, 1949. Except for a moderate increase in motor-vehicle deaths, sizable decreases were recorded in deaths from occupational, public non-motor-vehicle and home accidents.

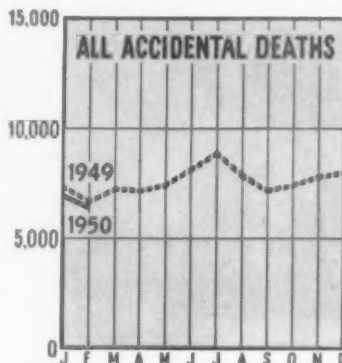
The total for the two months was 13,200, a reduction of 5 per cent from last year's comparable total of 13,900. There were relatively large decreases in deaths from home, public non-motor-vehicle and occupational accidents and a small increase in motor-vehicle fatalities.

Motor-Vehicle Deaths

The February total of motor-vehicle deaths was 2,190, an increase of 9 per cent over February last year. Compared to 1948, it was an increase of 3 per cent.

Deaths for the two months totalled 4,620, an increase of 6 per cent over the 1949 total of 4,350. The death rate per 100,000,000 vehicle miles was 7.3, a 4 per cent decrease from the 1949 two-month rate of 7.6, and 39 per cent below 12.0 for 1941.

Of the 46 states reporting for two months, 14 had fewer deaths, 5 had the same number, and 27 had more deaths. Reporting cities with populations over 10,000 had a decrease of 2 per cent for February and 4 per cent for the two months.



	1950	1949	Change
February	6,400	6,700	-4%
Two Months	13,200	13,900	-5%

Regional changes from 1949 in the two-month death totals were:

North Atlantic	+ 5%
South Atlantic	+19%
North Central	+10%
South Central	+ 4%
Mountain	+33%
Pacific	-15%

Occupational Accidents

Deaths from occupational accidents numbered approximately 800 in February, a decrease of 11 per cent from February last year. The two-month total was about 1,800, a reduction of 10 per cent from 2,000 for 1949.

The February frequency rate per million man-hours in seven sectional accident prevention contests conducted by the National Safety Council was 7.03, no change from 1949. The two-month rate was

7.28, an increase of 5 per cent. The February rate for community council inter-plant contests was 8.00, a decrease of 9 per cent from February last year. The two-month rate also decreased—10 per cent to 7.94.

Public Deaths

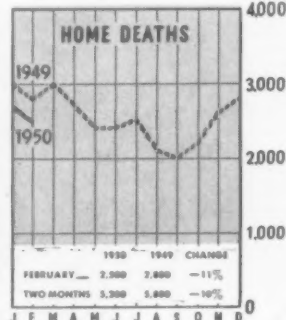
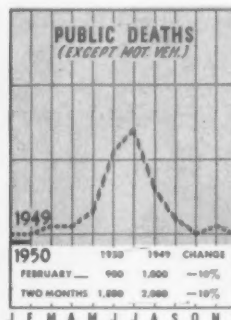
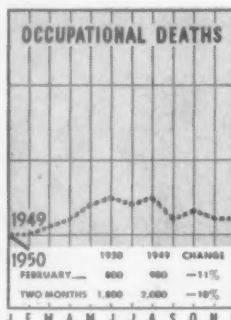
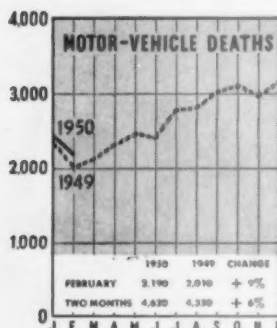
There were approximately 900 deaths from public non-motor-vehicle accidents in February, or 10 per cent fewer than in February, 1949. Decreases were reported in all classes with the exception of a small increase in fatal burns.

The two-month total was 1,800, or 10 per cent below last year's total of 2,000. Most of the reduction occurred in deaths from transportation and firearms accidents but deaths from drownings and falls also decreased. All age groups showed some reduction from 1949 with the greatest improvement recorded for persons 15 to 24 years of age.

Home Deaths

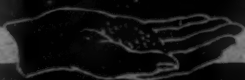
February deaths from home accidents numbered approximately 2,500, or 300 less than February last year. Most of the reduction occurred in deaths from firearms accidents but deaths from poisonings, burns, mechanical suffocation and falls also decreased.

The January-February total was 5,200, a 10 per cent decrease from 1949. Sizable decreases were recorded in deaths from poisonings and mechanical suffocation and moderate reductions in deaths from burns, firearms accidents and falls. There was a small decrease in deaths of persons 15 to 24 years of age, and moderate reductions in the other age groups.





Not For One Reason But For Many !



Suppose you asked the Purchasing Directors, or the Medical and Safety Directors, of the largest companies in America, why they continue to specify Pax Heavy Duty year after year. They would probably tell you because of its superb quality, or because they think it is the finest skin cleanser to be bought, or simply "because it's Pax," which would be reason enough.

But suppose you wanted specific answers to these specific questions,

Do they specify Pax Heavy Duty for performance?

Yes, of course! for it is truly remarkable for its cleansing ability. Pax-developed precision laboratory machines such as the Pax Electronic Soil Detector and Pax Suds-O-Meter prove that Pax Heavy Duty offers the utmost in skin cleansing efficiency, thorough and fast in action, and yet so gentle and safe, that only an actual demonstration can tell the whole story of its surpassing quality and merit.

Do they specify Pax Heavy Duty because the employees prefer it?

Indeed they do! They know that Pax Heavy Duty is an important factor in good employee relations. For here is a skin cleanser that gives them everything: lather, thorough cleansing, fast action and safety.

Do they specify it because both men and women can use it?

Why certainly! Women like the gentle and stimulating action of Regular Granulation Pax Heavy Duty fully as much as the men. And for those who don't have the problem of removing deeply imbedded grime, Pax developed an even softer, smoother Fine Granulation which wouldn't harm a baby's tender skin.

Do they specify it for safety?

Of course they do! They know that Pax Heavy Duty has played no small part in guarding against dermatitis in their plants; that Pax-Lano-Sav Emollient helps keep the most sensitive skin healthy and more productive; and

that the specially developed scrubber is as efficient and kind to the skin as modern science can produce.

Do they specify Pax Heavy Duty for economy?

Yes, that has a lot to do with it! They know from experience. They've used other products and found that Pax Heavy Duty goes much farther than most other skin cleansers.

Do they specify Pax Heavy Duty for...?

Any question can be answered "Yes!" For into this product is combined every advantage that years of experience and "know-how" has taught Pax Laboratory Technologists are desirable and practical. The word "Pax" stands for all of this.

If you are not now one of the countless Pax enthusiasts, these are a few of the many reasons why you too will find it advantageous to recommend or buy it. At your first opportunity try Pax Heavy Duty. Its acknowledged excellence will be a revelation to you.



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50F

Tanham Honored by Personnel Group



James Tanham (right), chairman of the Board of Directors of the National Safety Council, is congratulated by John H. Holtzboog, chairman of the New York Personnel Management Association on receiving the Association's 1950 Achievement Award.

JAMES TANHAM, vice-president of The Texas Company and chairman of the Board of Directors of the National Safety Council, has been presented the 1950 Achievement Award of the New York Personnel Management Association. The award was presented at the Association's April dinner.

The award is made annually for outstanding contributions over a period of years to the field of personnel administration. The award was initiated three years ago and previous recipients are Thomas Spates, vice-president of General Foods, and Glenn Gardiner, vice-president of Forstmann, Inc.

Isotopes Aid Study of Carbon Tetrachloride

In an attempt to learn more about the effects of carbon tetrachloride on persons breathing its vapors, scientists at the Dow Chemical Company have provided another example of the important peacetime uses for radioactive isotopes.

Dow research workers D. D. McCollister, Dr. W. H. Beamer, G. J. Atchison and Dr. H. C. Spencer utilized carbon-14 as an analytical tool in biochemical research. The results of their experiments were presented at the meeting of the Federation of American Societies for Experimental Biology held in Atlantic City in April.

Carbon tetrachloride, a commercial solvent widely used in home

and industry, has been the subject of many toxicological investigations. However, known chemical methods of analysis have not been sensitive enough to follow the path of minute amounts in the body. These men labeled the carbon atom of carbon tetrachloride with radioactive carbon-14 and were able to follow the absorption and distribution of the chemical in monkeys that inhaled the radioactive vapor.

In addition, the investigators were able to trace the elimination of minute amounts of the material and its metabolic products in expired air, urine, and feces of the monkeys.

This research was part of a comprehensive scientific study of the vapor toxicity of carbon tetra-

chloride carried out in the Biochemical Research Laboratory of the Dow Chemical Company. The knowledge gained from these studies will permit recommendations for safe handling of the product in its industrial uses and for the protection of persons who may be exposed to the chemical's vapors.

Revise Color Code for Gas Mask Canisters

Two new gases have been included in the revision of American Standard Safety Code for Identification of Gas-Mask Canisters (K13.1-1950) just issued by the American Standards Association. This code gives the individual color or marking to be used on each gas-mask canister indicating the type of gas or vapor for which it provides protection. It, therefore, plays a vital role in helping the workman to select the proper canister for his gas-mask before entering a room containing a dangerous concentration of any harmful gas or vapor.

Colors to identify hydrocyanic acid gas and chlorine gas-mask canisters have been added in this first revision in 20 years. In addition to the two new gases, the standard lists the colors assigned to canisters for protection against acid gases; organic vapors; ammonia gas; carbon monoxide; dusts, fumes, mists, fogs, and smokes in combination with any of the aforementioned gases or vapors; acid gases and organic vapors; acid gases, organic vapors, and ammonia gas; and all of the aforementioned atmospheric contaminants.

This standard was developed by a committee representing the manufacturers, users, insurance companies, and the government, sponsored by the National Safety Council under the procedures of the American Standards Association.

A good listener is always popular. And after a while he knows something.

NEW TINNING PROCESS

Doubles the Life of

ALFCO FIRE-GUNS

Alfco scores again! This time Alfco engineers have created and perfected a new exclusive process of protecting metal from the corrosive action which has attacked vaporizing liquid type fire extinguishers.

Yes, the world-renowned Alfco Fire-Gun Extinguisher is now tin plated for corrosion resistance throughout . . . insuring at least doubly longer life and more efficient service . . . and achieving still greater ease of operation than ever before.

All the internal parts of the Fire-Gun mechanism have been tin plated to resist attack by the chemical reactions which have been known to cause corrosion—the chief enemy of vaporizing liquid type fire extinguishers.

This new process has been inspected and approved by Underwriters' Laboratories and immediate deliveries of the new Fire-Guns are now being made.

Write us to have our salesman call with complete details of this newest development for increasing the life and improving the service of vaporizing liquid type fire extinguishers.

Tin plating eliminates dissimilar metal surfaces which encouraged electrolytic corrosion in old-style V L units. Also, by substituting tin for brass and copper surfaces of parts, acid-producing catalysts are removed. Results: Real corrosion resistance—longer life—easier operation!

No. 0, 1 qt. cap.
No. 2, 1½ qt. cap.



Double acting pump delivers entire contents in a continuous stream of over 25 ft. Flat shell bottom allows Fire-Gun to stand upright. Panic proof handle unlocks with ¼ turn either way. Approved by Underwriters' and Factory Mutuals Laboratories, Classification B-2 and C-2.

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VALUABLE DUST...

Some dusts are valuable! Dust from packing, transporting or processing raw materials or products can be *salvaged at a profit* by Pangborn Dust Control. For instance, one of America's largest chemical plants reports that on a yearly basis, their Pangborn Dust Control system recovers \$14,859 worth of valuable chemicals!

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Dust can be extremely dangerous! In certain concentrations, dust is actually more explosive than gasoline. With Pangborn Dust Control you can reduce explosive dust hazards, earn lower insurance rates, run less risk of damage to your plant. In the coal field alone, scores of processors rely on Pangborn Dust Control to protect their property!

BOTHERSOME DUST...



Dust costs you money! Dust makes walls dirty, gets into bearings and machinery, sends maintenance costs sky high! But with Pangborn Dust Control, housekeeping problems are solved *at a profit*. One well-known rubber company recently said: "We save over \$1200 a year with Pangborn Dust Control, even though dust has *no salvage value!*"

Look to Pangborn for the latest developments in Dust Control and Blast Cleaning. For full data on Pangborn Dust Control for your plant, write for Bulletin 909-A. Address: PANGBORN CORPORATION, 290 Pangborn Blvd., Hagerstown, Maryland.



STOP THE DUST HOG

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DUST CONTROL

**Home Builders Win
No-Accident Awards**

Sixty-four midwestern home builders received awards for accident prevention and perfect safety records for 1949 as announced by the Chicago Metropolitan Home Builders Association.

Awards for a continuing safety program covering Illinois, Iowa and Indiana builders were presented jointly by the Chicago Metropolitan Home Builders Association and the American Motorists Insurance Company in co-operation with the National Safety Council.

Certificates were awarded to six home builders for three year perfect safety records and to nine builders for no accidents in two years.

Participating in the program are home builders from the three midwestern states affiliated either with a local home builders association or the National Association of Home Builders of the United States. Ray E Hines, Hines Construction Company, is general chairman of the safety program which is headed by the safety and insurance committees in the local associations.

This year's safety promotion campaign produced 59.37 per cent increase in perfect safety records over last year. In 1949 a total of 38 builders chalked up perfect records, with eight of these for more than one year.

Of the 64 awards, 33 went to Chicago home builders, one to Hammond, Indiana, three to Maywood, Ill., two each to LaGrange and Oak Park, Ill., and one each to Aurora, Champaign, Des Plaines, Downers Grove, Elmwood Park, Evanston, Evergreen Park, Hinsdale, Naperville, Northbrook, River Forest, and Round Lake, all members of the Chicago Metropolitan Home Builders Association, and 10 to Des Moines, Iowa, builders.

In making the awards, a perfect record means no injuries which forced any employee to lose one or more days of pay.

Supervised from Chicago by Lawrence G. Holmes, insurance and safety manager of the Chicago

Metropolitan Home Builders Association, it is a constant safety promotion. Bulletins, meetings addressed by safety experts, field inspections and reports for corrective follow-up, safety posters and other means are used to aid home builders in attaining perfect safety records. Reduction in costs and insurance savings up to 50 per cent are achieved through reduction of lost time.

The provisions described indicate only the most important changes incorporated in the tenth edition. Other better-known provisions have been in effect for many years. These cover building construction, adequate exits, house-keeping, ramps, elevators, slide escapes, fire extinguishing equipment, signs and lighting, assembly halls, boiler rooms, air conditioning, and various conditions peculiar to hospitals and sanitariums.

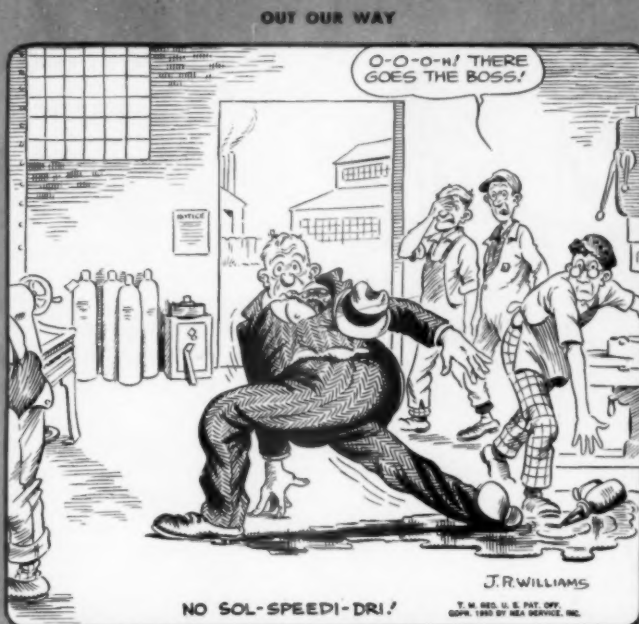
U. S. Rubber Co. Accidents Lowest in History

United States Rubber Company had fewer disabling injuries in 1949 than any year on record, according to figures released by Ernest W. Beck, supervisor of safety for the company.

Disabling injuries for the year totaled 347. The lowest previous figure was 522, recorded in 1948. There were 614 injuries in 1947, 693 in 1946, 858 in 1945 and 972 in 1944. The company has been keeping safety records since 1921, a year in which there were 1,080 injuries.

Improvement in safety is attributed to the increased emphasis put on this phase of industrial operation by the management of all U. S. Rubber Company plants. To stimulate interest in the safety program at the plant level, the president of the company sponsors an annual company-wide contest and gives an award to the plant with the best record in the contest. Additional contests are conducted in several divisions of the company under the sponsorship of the divisional managers.

The company's accident frequency rate in 1949 was 4.04 compared with 5.05 in 1948.



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NATIONAL SAFETY COUNCIL



One shudders to think what sort of life it would be if everyone was completely truthful. — Dr. Ben Karpman.

Post-War Report on Ruhr Coal Mines

Germany's coal industry in the Ruhr Valley has largely recovered from the damages of World War II and is again capable of contributing heavily to the economic recovery of Germany and western Europe, Secretary of the Interior Oscar L. Chapman reports.

The principal German coal-producing areas, the Ruhr and Aachen districts, are in the British occupation zone, but the mines there are under joint British-American supervision. As part of a program for rehabilitating the German coal mining industry, the U. S. Bureau of Mines, at the request of the occupying authorities, assigned three engineers, J. B. Benson, H. E. Sanford, and R. W. Stahl, to investigate hazards incident to coal mining.

This mission involved a study of safety conditions and practices in nearly all of the coal mines of the Ruhr. Their report, presenting a complete survey of conditions and practices in that area, has just been released.

In spite of the heavy drain of two world wars, Germany's active coal beds are far from exhausted, and the coal mining industry has a long future life, the report states. Preparation plants are generally efficient and compare favorably with similar American installations. Many of the surface plants which were severely damaged during the war have been repaired and are in operation.

Germany's coal mines are deeper and hotter than those in this country, and many of them lie under heavily populated areas. They are often steeply pitching, and some are extremely gassy. However, roof-control practices are good with long-wall mining, and ventilation systems are efficient. Back-filling is practiced to minimize surface subsidence. The report notes that about 98 per cent

of the coal is recovered.

Mining operations and the pressure of overlying strata produce dusty conditions in most Ruhr mines, but generalized rock dusting is not practiced, and "very little effort" is made to control dust at its sources, the publication states. However, it notes that many rock-dust barriers are installed in haulageways and air courses. Because rock drillers and workmen engaged in backfilling do not use respirators, many German miners contract silicosis.

In describing certain progressive features of German coal mining, the report cites excellent underground fire-fighting facilities, a legal and rigidly-enforced ban on smoking underground, a coal-mine inspection system, insurance and hospitalization benefits, well-equipped mine-rescue stations and trained mine-rescue teams, and highly effective apprentice-training schools.

Boys enter these schools at 14 for a four-year course, the first two years on the surface and the last two underground. Although accident rates are high in German mines, statistics show that graduates of these schools have better safety records than other workmen and are more efficient.

Coal miners are respected throughout Western Germany, and they are better paid than most other workmen, but absenteeism and labor turnover are still high, the report notes. It also discusses transportation, electrical installations, underground mining methods, efficiency, and production costs.

A free copy of Information Circular 7549, *Conditions and Practices at Coal Mines in the Ruhr District of Western Germany*, may be obtained from the Publications Distribution Section, Bureau of Mines, 4800 Forbes Street, Pittsburgh 13, Pa.



MERCUROCHROME*

(H. W. & D. BRAND OF MERBROMIN, DIBROMOXYMERCURIFLUORESCIN-SODIUM)

Do not neglect wounds, however small; even scratches and small cuts may become infected if they are not promptly and properly treated.

'Mercurochrome' (H. W. & D. brand of merbromin, dibromoxymymercurifluorescein-sodium) is one of the best antiseptics for first aid use. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association for this purpose.

The 2% aqueous solution is not irritating or toxic in wounds; minor injuries are reported more promptly when 'Mercurochrome' is the routine antiseptic, because treatment is not painful.

'Mercurochrome' solution keeps indefinitely; the color shows where it has been applied.

Physicians have used 'Mercurochrome' for more than 28 years.

Be sure to include 'Mercurochrome' in your first aid supplies.

*Reg. U. S. Pat. Off



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**Our lowest priced street 'n' shop shoe
ever to bear the name "Safety First" !**

HIGH STYLE moccasin oxford promises complete comfort for round-the-clock wear.

BURGUNDY leather, the color that is soaring to a new height in popularity!

NEOLITE sole and Goodyear welt construction! Arch supporting steel shank and other quality features.

FLANGED STEEL TOE for protection where it counts.

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West Coast Branch:
Pacific Bldg., 16th St.,
Oakland, Calif.

Union Made



The Safety Library

Recent books, pamphlets and
periodical articles for safety men.

Training

Tested Training Techniques. By Kenneth B. Haas and Claude H. Ewing. Published by Prentice-Hall, New York, 1950. 111 pp. \$2.00.

A handy little book that will give any honest educator some chuckles at his own expense, and will remind him to watch his teaching methods.

Illustrated with some nice sketches by Robert Deschamps, the book thus follows one important precept of the authors: "Do it with pictures."

The book is recommended to industrial trainers, although it is far from being the complete answer to every need, as the publisher's announcement promises.

Glenn Griffin

Psychology

The Psychologist in Industry. By M. E. Steiner. Published by Charles C. Thomas, Springfield, Ill., 1949. 107 pp. Price \$2.00.

Many industrialists, concerned with human behavior and recognizing the need for better understanding of people, are not fully aware of the specific ways in which an industrial psychologist may help. "Not infrequently is he envisaged as a psychiatrist . . . specializing in the field of nervous and mental diseases and capable of 'psycho-analyzing' a person on the spot."

This little book (it can be read in a couple of hours) tells interestingly, and in just enough detail, what is being done in three specific areas of activity:

Selecting and placing the worker,
Observing the worker on the job,
Counselling the worker.

In the chapter on selection, many kinds of tests are described and discussed. Throughout the book, extensive references are furnished.

Recommended for industrial people who want facts about industrial psychology.

Glenn Griffin

BOOKS AND PAMPHLETS

Mines

Comparison of Poisonous Gases from Permissible Explosives as Obtained in Bichel-Gage and Coal Mine Tests. Published by U. S. Bureau of Mines, 1950. 12P. Available from the Bureau, Publications Distribution Section, 4800 Forbes St., Pittsburgh 13, Pa. (Report of Investigations 4663). Free.

The Use of Dust Respirators in Coal Mines. Published by U. S. Bureau of Mines, 1950. 6P. Available from the Bureau, Publications Distribution Section, 4800 Forbes St., Pittsburgh 13, Pa. Free. (Information Circular 7561).

MAGAZINE ARTICLES

Accident Statistics

Basic Needs for the Analysis of Industrial Injuries. (In Monthly Labor Review, March 1950. P.267).

Rulings on "Borderline" Industrial Accident Cases. (In Industrial Standardization, April 1950. P.94).

Work Injuries in Clay Construction Products. (In Monthly Labor Review, March 1950. P.270).

Work Injuries in 1949; Preliminary Estimates. (In Monthly Labor Review, March 1950. P.265).

Cleaning

To Clean Motors Safely. By Jim Sparks. (In Operating Engineer, April 1950. P.42).

Engineers

Human Engineering vs. Accident Control. By T. R. Leadbeater. (In Supervision, April 1950. P.18).

Legal Registration for Safety Engineers. By D. H. McAnarly. (In Connecticut Journal of Industrial Safety, April 1950, P.4).

Handling Materials

Analyzing Your Material Handling Accident Problems. Part II. By Leroy A. Faulkner. (In Modern Materials Handling, April 1950. P.22).

Health

Acute Inhalation Toxicity of Beryllium. By Herbert Stokinger and others. (In Archives of Industrial Hygiene and Occupational Medicine, April 1950. P.379 and 398).

Arsine Poisoning. By Louis W. Spolyar and R. N. Harger. (In Archives of Industrial Hygiene and Occupational Medicine, April 1950. P.419).

Lightning

Are Your Stocks Lightning-Proof? By Tyler G. Hicks. (In Operating Engineer, April 1950. P.46).

Public Utilities

Accident Prevention Committee Meeting. By W. T. Rogers. (In Edison Electric Institute Bulletin, March 1950. P.97).

Safety Considerations in the Design and Operation of Transmission and Distribution Systems. By W. T. Rogers. (In Edison Electric Institute Bulletin, March 1950. P.81).

Refrigeration

Know Your Refrigerants. (In Operating Engineer, April 1950. P.86).

Waste Disposal

Neutralization of Acid Wastes. By B. W. Dickerson and R. M. Brooks. (In Industrial and Engineering Chemistry, April 1950 P.599).

Treatment of Cotton-Finishing Waste Liquors. By George G. Gordon. (In Industrial and Engineering Chemistry, April 1950. P.619).

Treatment of Cotton Printing and Finishing Wastes. By Stuart E. Coburn. (In Industrial and Engineering Chemistry, April 1950. P.621).

Manual for Cranemen

Procedures which cranemen and hitches should follow to work safely and effectively as a team are contained in a new 36-page pocket manual prepared by Allis-Chalmers Manufacturing Company, Milwaukee, Wis.

The manual carries instructions for cranemen, hitches and head hitches and defines the extent of their authority and responsibilities. It illustrates standard crane signals, shows how crane operation and inspection reports are executed.

Copies of the "Craneman and Hitches Manual," 25B6208A, are available upon request from the company's health and safety department.

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This moccasin style plus low price create a "will to wear". Constant foot protection by more of your employees will improve your plant safety record.

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Address.....

For Distinguished Service

Recent presentations of the National Safety Council's
Award of Honor for Distinguished Service to Safety

Stars indicate number of awards since the first.

American Enka Corp.

★★

Enka, N. C.—The 1949 injury severity rate was reduced 81 per cent as compared with 1948.

Brookhaven National Laboratory

Associated Universities, Inc., Upton, Long Island, N. Y.—Injury frequency rate reduced 76 per cent and severity rate 81 per cent in 1949 as compared with 1948.

The 1949 injury frequency rate only 39 per cent of the group average—injury severity rate but 7 per cent of such average. Award presented May 11, 1950 by Sidney J. Williams, assistant to the president, National Safety Council.

Union Carbide and Carbon Corp.

★

Carbide and Carbon Chemicals Div., K-25 Plant, Oak Ridge, Tenn.—The 1949 injury frequency rate was only 17 per cent of the group average—injury severity rate 66 per cent of such average. Injury frequency rate reduced 67 per cent in 1949 as compared with 1948.

Celanese Corp. of America

Celco Plant, Narrows, Va.—Injury frequency rate reduced 62 per cent and severity rate 79 per cent in 1949 as compared with 1948. The 1949 injury frequency rate only 46 per cent of the group average—injury rate but 17 per cent of such average. The plant operated 3,081,725 man-hours without a disabling injury from September 10, 1949 to March 4, 1950. The award was presented May 19, 1950 by John S. Cuthbert, field representative, Eastern Region, National Safety Council.

Chatham Manufacturing Co.

★★★

Elkin, N. C.—The 1949 injury rate only 19 per cent of the group average—injury severity rate but 13 per cent of such average.

Ford Motor Co.

Chester Assembly Plant, Chester, Pa.—For the operation of 3,148,741 man-hours without a disabling injury from May 11, 1949 to February 17, 1950.

Dallas Assembly Plant, Dallas, Tex.—For the operation of 4,237,992 man-hours without a disabling injury from July 27, 1948 to January 16, 1950.

Norfolk Assembly Plant, Norfolk, Va.—For the operation of 3,323,004 man-hours without a disabling injury from October 6, 1948 to January 31, 1950. Award presented May 18, 1950.

National Tube Co.

Christy Park Works, McKeesport, Pa.—The 1949 injury frequency rate only 17 per cent of the group average—injury severity rate 34 per cent of such average. Injury frequency rate reduced 60 per cent in 1949 as compared with 1948. Award presented May 1, 1950.

★ *National Works, McKeesport, Pa.*—The 1949 frequency rate was only 33 per cent of the group average—injury severity rate 42 per cent of such average. Injury frequency rate reduced 20 per cent in 1948 as compared with 1947.

Board of Transportation of the City of New York

New York City Transit System—Injury frequency rate reduced 28 per cent and severity rate 26 per cent in 1949 as compared with

1948. Award presented to Mayor O'Dwyer on May 11, 1950 by General James H. Doolittle, chairman of the New York Green Cross Campaign.

Phillips Chemical Co.

Plains Plant Div., Bartlesville, Okla.—For the operation of 3,001,629 man-hours without a disabling injury from February 26, 1948 to January 27, 1950. Award presented May 17, 1950.

Pittsburgh Plate Glass Co.

Barberton Chemical Plant, Barberton, Ohio—The 1949 injury rate was only 17 per cent of the group—injury severity rate but 16 per cent of such average. Injury frequency rate reduced 84 per cent and severity rate 11 per cent in 1949 as compared with 1948. Award presented May 17, 1950 by the Ohio State Safety Council.

Glass Division Research Laboratories, Creighton, Pa.—For operating without a disabling injury from July 19, 1942 to February 28, 1950. Award presented May 26, 1950.

Pullman-Standard Car Mfg. Co.

★

Chicago—Injury frequency rate reduced 18 per cent and severity rate 23 per cent in 1949 as compared with 1948. Award presented May 4, 1950.

Shell Chemical Corp.

★★

Shell Point Plant, Pittsburg, Calif.—The 1948-1949 injury frequency rate was only 7 per cent of the group average—injury severity rate but 2 per cent of such average. Injury frequency rate reduced 78 per cent and severity rate 87 per cent in 1948-1949 as compared with 1946-1947. Award presented May, 1950 by Alvin S. Hambly, campaign consultant, Contra Costa Safety Council.

Teletype Corp.

Chicago—Injury frequency rate reduced 66 per cent and severity

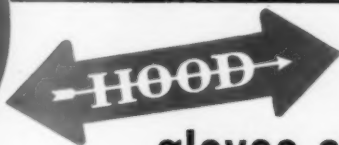
—To page 68



MODEL 7703

Full Neoprene coated, 14½" gauntlet. Special thumb crotch reinforcement. Liquid proof, curved fingers . . . for all general industry.

INDUSTRY INSURANCE?



gloves are a SAFE policy!

Yes, over and above your present insurance program for employee protection, be sure of the added insurance provided for protection to employees' *vital* hands with Hood Industrial Gloves!

Shown above are two of the many types of Hood gloves that have shown the way for years to safer protection against chemicals, oils, acids, caustics, corrosives and abrasives in every line of industry and manufacture.

Let this leadership give you this added insurance . . . insurance that benefits *both* your employees *and* your business. Our catalog shows the Hood line of Neoprene, Rubber or Plastic coated gloves for *every* job in *all* industries.



MODEL 4703

Full Neoprene coated, knit wrist style used in all general industry. Liquid proof, curved fingers, no seams on working surface.



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HOOD RUBBER CO.
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SAFETY FLOOR FINISH

Keeps Floors Safe And New-Looking

EVERYTHING FOR INDUSTRIAL HEALTH AND SAFETY

You can depend upon Con-Sol Products for every maintenance problem — cleaning, insect or bacteria control, floor upkeep, health and safety.

Write Con-Sol technicians without obligation, about any specific health hazard or unusual condition in your plant. Many years of experience and over a hundred industrial housekeeping products are available to solve your every maintenance need.

Helpful Maintenance
Chart On Request



Tested and approved
by Underwriters Laboratories

Skidproof gives any type of floor — wood, linoleum, rubber, asphalt, tile or terrazzo — a hard, durable slip-proof surface that protects against the toughest kind of wear. It's easy to apply, easy to clean. It's quick-drying, odorless, economical — one gallon covers 2000 square feet!

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Looking!*

*Better
Protection!*

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Stronger than Steel

* **It's FIBERGLAS**

—resin impregnated. It's remarkably tough—so tough we had to devise new tortures in place of conventional tests to measure its full ability to protect heads. This Hard Boiled Hat is as handsome as they come, in new colors and white . . . or a glow-in-the-dark finish.

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BULLARD
IN SAFETY

Bullard

A GENUINE
HARD BOILED HAT

MFG. BY
E. D. BULLARD CO.
S.E. - U.S.A.

Hard Boiled Hat

FIRST in Head Protection since 1919

More Resilient—This crown is drum-like in its resiliency. We had a heck of a time making a dent in it with ordinary test objects. The hammocks, too, are like hydraulic shock absorbers.

Lighter weight—lighter by a full ounce than former hats, which is another way of saying wearing comfort is again improved.

Coolest to wear of any protective hat made. Laboratory tests, simulating sun's rays, prove that this hat is cooler than any you've ever worn . . . important to any outdoor worker on any job. Job efficiency increases with employee comfort. Floating hammock permits air circulation, encourages further cooling. For winter, snug-fitting, quickly interchangeable liners protect on even the rawest day.

Lifetime resiliency—Retains full resiliency indefinitely. Will not deteriorate or become brittle with age.

Impervious to moisture. High dielectric strength. Passes all dielectric tests.

Choice of color—White or grey are standard. Also available are red, green, or practically any color on special order. Color is impregnated—all the way through—will not fade or deteriorate.

Save money!—One size fits all heads, reduces inventories. Fully adjustable headband and hammock—self-shaping for comfort. 6-second hammock and headband assembly change. Genuine leather headbands optional.

Start saving money today! \$4.00 will get you the finest head protection ever built. (Costs less in quantity.) Write

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COMING EVENTS

In the Field of Safety

June 1-3, Roanoke, Va.

Sixteenth Annual Virginia State-wide Safety Conference. (Hotel Roanoke). William M. Myers, managing director, Richmond Safety Council, Allison Bldg., Richmond 19, Va.

June 1-3, Longview, Wash.

15th Annual Western Forest Products Safety Conference. (Monticello Hotel). Byron Oyster (chairman), Weyerhaeuser Timber Co., Box 1645, Tacoma, Wash. C. R. Rustemeyer, Canadian Forest Products, Ltd., 510 West Hastings, Vancouver, B. C.

June 5-7, Washington, D. C.

The President's Conference on Industrial Safety. William L. Connolly, director, Bureau of Labor Standards, U. S. Dept. of Labor, Washington, D. C.

June 7-9, Pittsburgh, Pa.

Twenty-fifth Annual Western Pennsylvania Safety Engineering Conference. (William Penn Hotel). Harry H. Brainerd, executive manager, Western Pennsylvania Safety Council, Chamber of Commerce Building, Pittsburgh 19, Pa.

June 12-13, Fargo, N. D.

Third Annual North Dakota Safety Conference. Paul Drew, safety director North Dakota State Highway Dept., Bismarck, N. D.

June 18-21, Boise, Idaho

Western Safety Conference. Paul V. Black, president, c/o Idaho Compensation Co., Boise, Idaho.

June 30-July 2, Chicago

American Association of Railway Surgeons. (Drake Hotel). Chester C. Guy, M.D., secretary, 547 West Jackson Blvd., Chicago 6.

Sept. 14-15, York Harbor, Me.

Twenty-third Annual Maine State Safety Conference. (Marshall House). A. F. Minchin, director, Industrial Safety Division, Department of Labor and Industry. Augusta, Me.

September 19-21, Cleveland, O.

Twelfth Annual Ohio State Safety Conference. (Hotel Carter). Carl L. Smith, secretary-treasurer, Suite 508, 2073 E. 9th St., Cleveland 15, Ohio.

Oct. 16-20, Chicago

Thirty-eighth National Safety Congress and Exposition. (Stevens Hotel). R. L. Forney, general secretary, National Safety Council, 425 North Michigan Ave., Chicago 11.

Falling HAZARD SIGNS

Even the sharpest eye cannot see thru an armload of boxes.



Look Out!

FALLING HAZARDS are major ones in Industry, often resulting in injury or death.

People fall over things carelessly left in the way; they fall down stairs; off ladders. Others are victims of objects falling on them from roofs, scaffolds, shelves . . . out of other people's hands.

STONEHOUSE SIGNS For Accident Prevention

help prevent these accidents. Post Stonehouse Falling Hazard signs . . . especially designed and worded for this specific purpose.

Our Catalog No. 8, 64 pages, in full color, is free on request.

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ACCIDENT PREVENTION SIGNS IN STANDARD COLORS AND DESIGNS

WHICHEVER YOU CHOOSE,

BUFFALO *better-built*

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Better Performance!

THE NEW STAINLESS STEEL Fire Extinguishers

Far stronger. Tested to 500 lbs. instead of the usual 350 lbs. Nearly 7 lbs. lighter. Permanent finish, rust-resistant, acid-resistant, corrosion-resistant, oxidation-resistant. Available in Soda-Acid, Foam and Automatic Clear Water types. Size: 2½ gals. Approved by Factory Mutual and Underwriters Laboratories.



THE NEW CARBON DIOXIDE Fire Extinguishers with Squeeze Grip Valve

Liberates a clean, dry, odorless, inert gas under high pressure without pumping. Snuffs out flames in seconds. Especially effective on highly flammable liquids and fires of electric origin. Non-damaging to any material. 2½, 5, 10, 15, 20, 50, 75 and 100-lb. sizes. Approved by Underwriters Laboratories.

Buy from your local Buffalo distributor. If unable to secure, please write us for name of nearest distributor.

BUFFALO FIRE APPLIANCE
CORPORATION
DAYTON 1, OHIO

Personals

The Borden Company has appointed JOHN A. OETZEL as manager of its newly organized safety and fire prevention department, and FRANCIS T. MCGOWAN as safety director. With Borden's for 19 years, Mr. Oetzel has been chief fire prevention engineer since 1946. Mr. McGowan joined the company as a safety assistant in 1942 and succeeds EDGAR G. QUESNEL, who has retired as safety director after 13 years of service.



J. A. Oetzel



F. T. McGowan



E. G. Quesnel

Mr. Quesnel has announced the opening of an office as consultant in safety and industrial relations at 350 Madison Ave., New York 17. For many years he was safety engineer for Commonwealth Steel Company (now General Steel Castings Corp.) at Granite City, Ill. In 1932 he entered the service of the federal government and in 1937 became safety director for Borden's. During the war he served on the Committee for the Conservation of Manpower in the Defense Industries.

Appointment of E. H. FORSTROM to the newly created position of director of training has been announced by C. B. Pollack, vice president in charge of production of Allegheny Ludlum Steel Corporation, Pittsburgh, Pa.

Mr. Forsstrom, previously assistant manager of the company's Watervliet, N. Y., plant, took over his new duties May 1. A native

of Bridgeport, Connecticut, he joined a company training course in 1935 after receiving a civil engineering degree from Rensselaer Polytechnic Institute. At the completion of the course, he was transferred to the company's plant in Dunkirk, N. Y., where he held various positions of management.

A. N. BRION, for many years an executive of the Greyhound Bus System, was elected President of the Northland Greyhound Lines at a meeting of the company's directors in Chicago April 26. He succeeds William J. Kay, who retired May 1.

Mr. Brion, who has had thirty years' active experience in the bus business, takes over his new position after having served three years as president of the New England Greyhound Lines. From 1944 to 1947 he was safety director for the Greyhound Corporation, a holding and management company of the nation-wide transportation system.

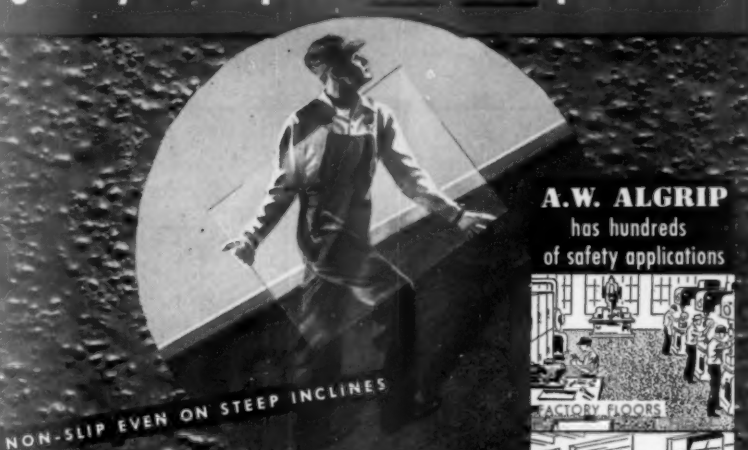
LYNN D. WILSON, PH.D., announces the formation of the Wilson Industrial Hygiene and Research Laboratories at 330 South Wells Street, Chicago. Dr. Wilson recently purchased the physical assets of the industrial hygiene consulting practice of the late Dr. C. O. Sappington and will conduct a similar service. In addition, engineer service in remedial measures associated with industrial health problems will be available.

WESLEY M. GRAFF has been appointed assistant supervisor of safety for United States Rubber Company.

Mr. Graff joined the company in 1942. He was made assistant safety director of the company's tire plant in Eau Claire, Wis., in 1943. He became safety director of the Detroit plant in 1945. He was transferred to New York in October of last year and recently has been serving as assistant to Ernest W. Beck, supervisor of safety.

Mr. Graff is a native of Westfield, N. J. He attended Rutgers University and later took special courses in safety at New York University and Illinois Institute of Technology.

Only one rolled steel floor plate gives you complete anti-skid protection



NON-SLIP EVEN ON STEEP INCLINES

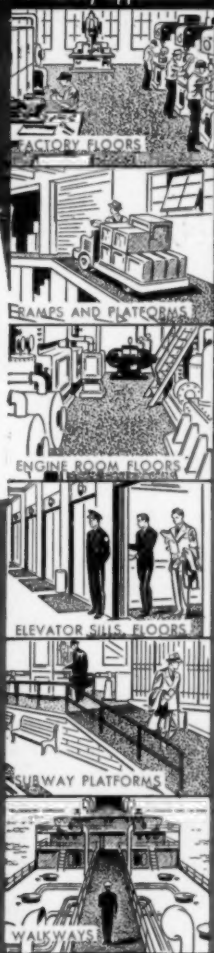
It's New, Revolutionary
ALGRIP
ABRASIVE ROLLED STEEL
FLOOR PLATE

There's nothing like it, absolutely nothing like A.W. ALGRIP. It's the one and only Abrasive Rolled Steel Floor Plate. A.W. ALGRIP is made by rolling tough abrasive grain (the same type used in grinding wheels) as an integral part of the upper portion of steel floor plate. Result: A floor plate that's truly non-slip even when wet or on steep inclines. It keeps men's feet safe and secure.

Because Algrip is rolled steel, it is stronger than other abrasive floorings and withstands severe punishment without cracking or chipping. Then, too, thinner sections may be used without reducing load carrying capacity.

Get complete information about A.W. ALGRIP now. Write or use the coupon for a FREE copy of our 8-Page Catalog.

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A.W. ALGRIP ABRASIVE ROLLED
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Green Cross News . . .

Activities of Local Safety Councils and Chapters

Green Cross Campaigns

Reports from 1950 Green Cross Fund Campaigns in Chapter cities are encouraging and indicate an increase in the number of top civic leaders assisting in their drives. Most of the campaigns were scheduled for May and June.

In New York City, General James Doolittle, vice president of Shell Oil Company, is chairman of the Green Cross Campaign, conducted by the Greater New York Safety Council in cooperation with the National Safety Council.

E. A. Roberts, chairman of the Waterman Steamship Corporation and chairman of the Board of Trustees of the Mobile (Ala.) Safety Council, is directing the raising of a council sustaining fund with the assistance of O. H. May, President of the May Supply Company, and Max Harrison, president of the safety council. Ross Riamond, Jr., Mobile attorney, is directing the popular \$1.00 membership drive.

Claire V. Goodwin, president of San Francisco Chapter NSC, is general chairman of its drive, with Phillip Johnson, president of the West Coast Advertising Company, as vice chairman.

Robert P. Tracy, retired Chief of Police of Oakland, is general chairman of the East Bay Chapter's 1950 campaign. The East Bay Chevrolet Dealers, Inc., have contributed a sedan to be awarded as a prize.

Kansas City's Green Cross Drive was launched on April 17 under the direction of the Cumerford's Community Service, Inc. The Kansas City goal is \$35,000. Tom A. Burke of NSC was the kickoff speaker.

The Hamilton (Ohio) Safety Council mobilized more than 100 volunteer workers for a 15-day

campaign in late May or June.

The Los Angeles Green Cross goal is \$100,000 and the drive is set for late May or June.

Dayton conducted a successful campaign in February and March.

Cleveland launched its campaign in May under the general direction of Honorable Lee E. Skeel, president of the Greater Cleveland Safety Council, with several hundred volunteer workers assisting.

Featuring the slogan, "Give to the Green Cross; the Green Cross Gives Life!" the St. Joseph (Mo.) Safety Council conducted its campaign during May and early June. Earl F. Campbell, director of the NSC Field Organization, was the opening speaker.

Hicks is Hamilton Manager

W. Russell Hicks, of Kenova, W. Va., has been appointed director of the Hamilton Safety Council succeeding R. Brandon Marshall who resigned recently to become managing director of the new Denver Chapter. Hicks has been safety director of the Huntington Bumper Division of Houdaille-Hershey Corporation. He has had broad experience in the field of industrial safety and public relations. Hicks took over his new duties on May 4. Mr. Marshall started his work in Denver on May 5.

Harrah Bennett Retires

Harrah K. Bennett for many years director of the Safety Division of the Automobile Club of Rhode Island has retired. Bennett is one of the pioneers in the local council field. H. Ben Garvin will succeed him as manager of the Safety Division.

Cleanup Campaigns

The Rochester Safety Council

of the Chamber of Commerce has given wide distribution to an attractive 4-page leaflet, "Rub Out Rubbish Now!" The leaflet was used as a promotional piece in Rochester's cleanup campaign, in industries as well as private homes. The Hamilton (O.) Safety Council also used a strong appeal to the children of that city to help the city fire chief in removing fire hazards through a city-wide cleanup campaign.

Industrial School

The Twin Cities Area Safety Council recently sponsored an industrial safety school in the St. Joseph-Benton Harbor area. "Bud" Gray, president of the 1900 Corporation, was a speaker. The series consisted of four weekly sessions held on Thursday evenings.

Letterhead With a Punch

The San Francisco and East Bay Chapters NSC are using a striking letterhead in their Green Cross Campaigns. The letterhead, in three colors—yellow, green, and black—features a strong design with the Green Cross Emblem and the wording, "Join Now" The letterhead carries the names of the governing board of each chapter.

Year Round Home Program

A continuous campaign for home safety has been inaugurated in Atlanta under the direction of the Greater Atlanta Safety Council. Mrs. Alfred R. Kivette, chairman of the Council's Home Division, announces that the program will follow the same general pattern of the "Operation Safety" project and that different groups will sponsor the various monthly themes. Cooperating organizations include the Women's Chamber of Commerce, Business and Profes-

sional Women's Clubs, Federation of Women's Clubs, American Institute of Architects, the Garden Clubs and the Boy Scouts.

Industrial Conferences

The Minneapolis Safety Council recently conducted a series of occupational conferences consisting of four monthly sessions, the first of which was held January 31. Sectional sessions at each meeting were followed by a general meeting. Paul Jones, of NSC, was the keynote speaker.

Fort Wayne Meeting

The Northeastern Indiana Safety Conference in Fort Wayne, April 25-26, gave special emphasis to "The Human Side of Safety." The Conference had an interesting exhibit. Earl F. Campbell, director of NSC Field Organization, was a featured speaker.

Sioux City Safety Car

Sioux City (Ia.) now has an official automobile for accident prevention work. The car is equipped with two-way radio, a public address system, cameras and other general police equipment. It is in use 16 hours a day, according to Elmer S. Swenson, secretary of the Sioux City Safety Council, which is cooperating with the police department.

THE HONOR ROLL

Records of operation exceeding 500,000 man-hours, or one year, if exposure exceeds 250,000 man-hours, without a disabling (lost-time) injury are invited.

Aluminum Co. of America

Cleveland Plant, Cleveland, Ohio—December 19, 1949 to March 15, 1950; 2,369 employees; 1,200,288 man-hours.

Anchor Hocking Glass Corp.

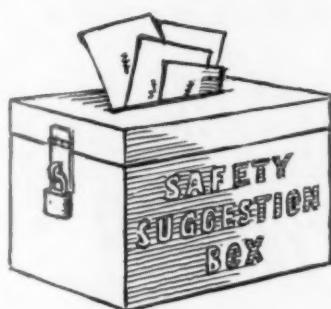
Plant No. 6, Salem, N. J.—May 29, 1948 to April 7, 1950; 1,230 employees; 4,340,957 man-hours; continuing.

Celanese Corp. of America

Bridgewater Plant, Bridgewater, Va.—March 25, 1949 to March 24, 1950; 345,141 man-hours, continuing.

Container Corp. of America

Carthage Plant, Carthage, Ind.



132 NEW IDEAS WITH SAFETY AS AN EXTRA DIVIDEND!

Here is a book full of ideas for accomplishing difficult production tasks with great speed, accuracy, and reduced costs, and yet every one of the suggestions might well be dropped into the Safety Suggestion Box.

For instance, Spencer Vacuum handles hot materials such as ashes and cinders, and cleans out the bottoms of 30 foot car wheel pits while still hot.

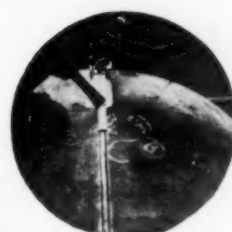
Conveying of chemicals, foods, silica sand and other materials by the ton, is accomplished without scattering dust.

Fumes from autos in repair shops, from welding operations and in chemical plants, are collected at their source.

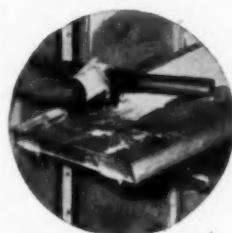
Rock drills used in quarries or for concrete are provided with a hood connected to Spencer Vacuum.

And, with the same Spencer Equipment, floors, walls, ceilings, pipes and all machinery can be kept clean.

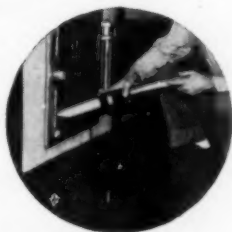
ASK FOR THE SPENCER BULLETIN



*Recovering
Welding Flux*



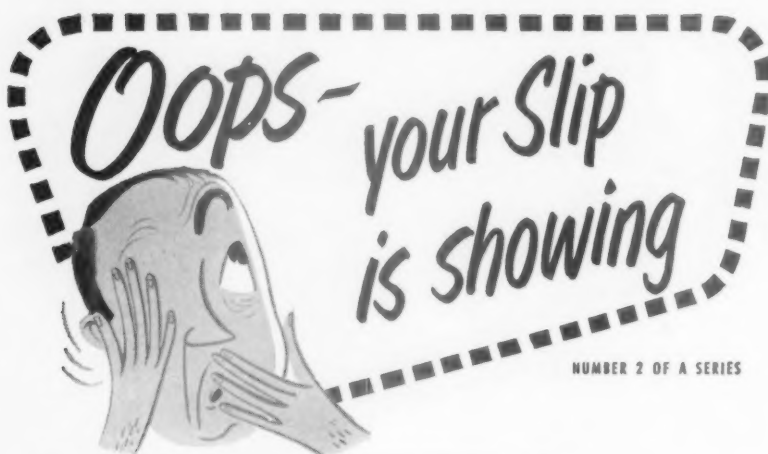
Chemicals



*Removing
Cocoa Shells*

356-D

SPENCER VACUUM
HARTFORD
CLEANING
THE SPENCER TURBINE COMPANY, HARTFORD 6, CONN.



NUMBER 2 OF A SERIES

In every day living, Spoonerisms, tongue-twisters, lip-slips, pen-puns . . . or call them what you will . . . seem to occur all too frequently. One can naturally attribute such mis-statements to the complexities of the English language. Gabbing and pen-pushing in English is indeed a problem. Take for example these tid-bits from some of our most "correct" newspapers . . . "Whether the millionaires were most interested in stocks or blondes, he declined to say" . . . And here's a nice way to spend a lonesome evening, "COPS PINCH NUDES AT STAG PARTY." Another equally as entertaining: ". . . seldom has there been so splendid a display of beaux and bellies."



* * *



One of Dr. Spooner's prize slips, which, incidentally, almost cost him a slight tar-and-feather-job, goes something like this: "I am tired of addressing 'beery wenches,' and shall leave immediately by the 'town drain.'" . . . Then there was the gentleman, who upon entering the house, muddy from a rainy, wintry day, misunderstood the angry request: "Hush that brat; it's roaring with pain outside!" We should all like this one: A servant was instructed to "Take the flea off my cat and heave it at the louse of my mother-in-law!"

* * *

And, let us not forget radio . . . here they really pull some peachy ones. While drooling the miraculous merits of a certain massaging cream, the announcer's voice mellowed and sighed, "Ah, yes, milady you too can be 'abreast' of the times. . . ." . . . A prominent comedian, ribbing his female guest star about her scanty evening dress, apologized, "Pardon, dear, but your hip is showing."



* * *



And finally the clincher. A Hollywood star, being interviewed by a fashion editor, was tabbed with this one. She proudly remarked, "I think women's clothes are very interesting. I've been successful with them, on and off, for ten years!"

* * *

Now to get to the meat of the thing! Of course, we can't do much about the slips above except perhaps offer our pity! However, if you have "slip" trouble underfoot, we are "Johnny-on-the-spot" so to speak! Diversey Quik-Sil and Aqua-Lic, oil, grease and water absorbents, are terrific anti-slip products. They give you safety-assured, performance-proved, low-cost protection against slippery floors . . . give you easier-to-clean, safer floors, greater economy, day in and day out!



WANT PROOF?

WANT A SAMPLE?

WRITE TODAY!

THE DIVERSEY CORPORATION

Maintenance Products Department

1820 Roscoe Street • Chicago 13, Ill.

In Canada: The Diversey Corporation (Canada) Ltd.

100 Adelaide Street West, Toronto, Ontario

—February 1947 to February 1950; 176 employees; 1,228,416 man-hours.

Pittsburgh Plate Glass Co.

Barberton Limestone Mine, Barberton, Ohio—October 22, 1948 to November 21, 1949; 519,533 man-hours.

Republic Steel Corp.

Transportation Dept., Youngstown District—914,659 man-hours as of April 7, 1950.

Union Barge Line Corp.

Pittsburgh, Pa.—1,000,000 man-hours as of April 1, 1950.

United Air Lines

Executive Offices, Chicago, Ill.—March 1949 to December 1949; 1,586 employees, 2,433,088 man-hours.

Sheet Metal Shop, San Francisco Maintenance Base, San Francisco, Calif.—December 1949 to April 1950; 109 employees; 402,864 man-hours; continuing.

Calendar Contest Winners For April

First prize in the National Safety Council's Safety Calendar Contest goes this month to John Gabor, Jr., of Socony-Vacuum Oil Company, Inc., East Chicago, Ind. The theme in this contest was safe use of machinery. Mr. Gabor's two-line rhyme was adjudged best of all those submitted. It was:

*Buy a safe machine when you buy it,
Know how to use it when you try it.*

Second prize went to Charles Bahde, Cedar Bluffs, Nebr., for this rhyme: *Instructions that she should have read,
Just now, would stand her in good stead.*

Third prize was awarded to Mrs. Daisy Haines, bookkeeper, Westford Milling Company, Westford, Pa., for the following rhyme:

*Whatever the hitch is,
Know where the switch is.*

Thirty \$5 awards were issued to:

Mrs. Will Moss, Tetonia, Idaho.

B. J. Smith, Howard Smith Paper Mills, Ltd., Cornwall, Ont., Canada.

George Koehler, North Industry, Ohio.

Mrs. Florence Pukstas, Rheem Manufacturing Co., Bayonne, N. J.

Louis H. Driml, Omaha, Nebr.

Mrs. R. H. Holden, Sales Dept., Midstates Steel & Wire Co., Wilmington, N. C.

Mrs. W. E. Gerles, Fresno, Calif.

John E. Neville, C. Schmidt & Sons, Inc., Phila., Pa.

Mrs. Richard W. Myers, Battle Creek, Mich.

Louise Knight, Lometa, Tex.

Leif Hasund, Lumber Division, Anaconda Copper Mining Co., Missoula, Mont.

Mrs. Nelson B. Stockwell, New Orleans, La.

Mrs. William E. Adams, Charlotte, N. C.

Tony Mosca, Socony-Vacuum Oil Co., Inc., East Chicago, Ind.

Mrs. Robert C. Blalock, Abbeville, Ala.

Oliver Sheerin, Burlington, Mass.

Howard Klug, Nordberg Manufacturing Co., Milwaukee, Wis.

Mrs. Joseph C. Hartney, Phila., Pa.

H. E. Snider, The Steel Co. of Canada, Ltd., Hamilton, Ont., Canada

Mrs. Wm. Silbernagel, Chicago.

Leon Emeigh, Sharples Chemicals, Inc., Dearborn, Mich.

Mrs. J. A. Condon, Normandy, Mo.

F. E. Tuggle, Alpha Portland Cement Co., Birmingham, Ala.

H. Leonard Ditchfield, Oxnard, Calif.

Mary Jane Holden, Midstates Steel & Wire Co., Crawfordsville, Ind.

Mrs. Vivian Johnson, postal clerk, Lewis, Kans.

Mrs. Ruth Schaefer, Sayreville, N. J.

Mrs. Flora Murray, registered nurse, San Antonio, Tex.

Donald E. Care, draftsman, American Bridge Co., Elmira Heights, N. Y.

F. Dale Long, vocational agriculture instructor, Galva High School, Galva, Ill.

A new contest is offered each month through the safety calendar.

Beryllium Poisoning

Beryllium, a metal known as a dangerous industrial poison, apparently causes injury by interfering with chemicals that help the body to use starches and sugars. This insight into the deadly poison for which there is no known antidote is revealed in a report read by University of Chicago scientists before the meeting of the Federation of American Societies for Experimental Biology at Atlantic City April 21.

Kenneth W. Cochran, research assistant, Marcella Mazur, technician, and Kenneth P. DuBois, assistant professor, of the university's department of pharmacology and toxicity laboratory, discussed the chemical aspects of acute beryllium poisoning as it affected rats and guinea pigs in the laboratory.

The University of Chicago scientists reported that a single dose of about one eight-thousandths of an ounce of beryllium per pound of body weight had one chance in two of killing a guinea pig within

CM

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SLING CHAINS

You can see for yourself that they are safe.

Just one of the big advantages of HERC-ALLOY Sling Chains is that you can determine their serviceability by a simple visual inspection.* Ordinary steel or iron chains, on the contrary, grow dangerously brittle with age... an insidious threat to the safety of men and materials. That's why more and more of the important companies are standardizing on HERC-ALLOY Sling Chains... because you can see for yourself that they're safe.

*Write for your copy of this new, informative booklet. No charge.



HERC-ALLOY FEATURES

- America's first alloy steel sling chain... first to bear a serial number.
- Every CM HERC-ALLOY Sling Chain is alloy steel throughout... links, rings, hooks. There is only one grade... the best.
- Every chain is individually tested and accompanied by a certificate of registration.
- Links are side welded for maximum strength by patented INSWELL electric method.
- HERC-ALLOY Chains should never be annealed.
- HERC-ALLOY Chains are lighter... stronger... easier to handle... outlast ordinary chains 4 to 5 times... cost less on the job.

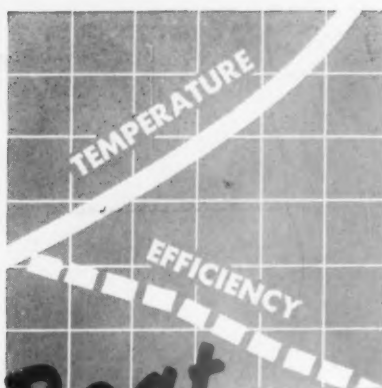
HERC-ALLOY... the chain you can SEE is safe

COLUMBUS-MCKINNON

CHAIN CORPORATION

(Affiliated with Chisholm-Moore Hoist Corporation)

GENERAL OFFICES AND FACTORIES: TONAWANDA, N. Y.
SALES OFFICES: New York • Chicago • Cleveland • San Francisco • Los Angeles



Beat Heat Fatigue

with
McDonald
1.4.U
SALT
TABLETS



**In the handy
throw away dispensing carton.**

In three types — (1) popular enteric coated tablet (eliminating risk of nausea), (2) salt plus dextrose, and (3) plain salt tablets. Disposable cartons in two sizes — economy dispenser of 1,000 or handy 500-tablet dispenser.

WRITE FOR CIRCULAR FF3

E. F. McDONALD CO.
Manufacturers & Distributors
of Industrial Safety
Equipment

**5112 South Hoover Street
Los Angeles 37, California**
Other Offices in San Francisco & Houston,

thirty days. A dose only a tenth as large was equally fatal to rats.

Ordinarily, beryllium destroys the activity of a chemical called alkaline phosphatase in the body of animals susceptible to beryllium poisoning. In the case of the more resistant guinea pigs, however, beryllium exerts a much less damaging effect on the alkaline phosphatase.

Alkaline phosphatase is an enzyme that helps the body use the carbohydrates in foods.

The blood serum of guinea pigs contained less alkaline phosphatase than the blood serum of rats. Therefore, it appears that there is a direct relationship between the effect of beryllium on alkaline phosphatase and the susceptibility of a kind of animal to beryllium poisoning.

Beryllium poisoning became a serious industrial hazard in recent years when the metal was introduced into new alloys and into the lining of fluorescent light tubes. The greatest precautions are required in its handling.

The research conducted at the University of Chicago is aimed at finding the mechanism of beryllium poisoning in order to dis-

cover methods of prevention and cure.

In this research it is essential to experiment with animals found to be both susceptible and reasonably resistant to the poison. Animal research is needed to discover basic facts which may have application to prevention and treatment in human beings.

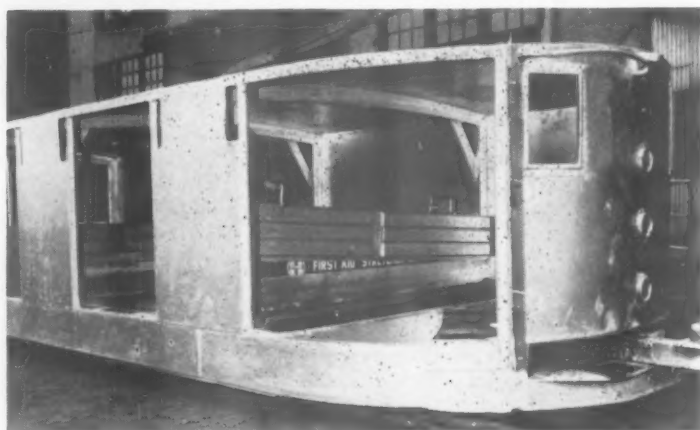
Cartoon Character Stresses Good Housekeeping

A continuing drive in the plants of the ATF Incorporated group of companies to tighten production, cost and quality standards, has enlisted the aid of a new character named "Wastie," central figure in a series of cartoon-style posters.

Wastie eats money and loves oil-slick, accident-causing floors. He dotes on slipshod methods that make the scrap pile grow, and he is passionately fond of the lazy and forgetful.

In preparing these posters, ATF's human relations department often varies them a bit so they will apply specifically to individual plants and the products made in them. Companies in the ATF In-

Mantrip Car Can Serve As Ambulance



This newly designed mantrip car for Jones & Laughlin Steel Corporation's mines can be quickly transformed into an ambulance for emergency work. A special first-aid outfit, developed by Mine Safety Appliances Company, is stored in each car. The steel first

aid case, containing folding stretcher, splints, blankets and other equipment, is designed to resist dampness and dust. Extra large front door of the mantrip car allows entry of a stretcher, which is transported resting between the seats.

corporated family are American Type Founders, Inc., Elizabeth, N. J., and Brooklyn and Mount Vernon, N. Y., manufacturer of type, presses and other printing equipment; Daystrom Corporation, Olean and Friendship, N. Y., and Balboa Pacific Corporation, Fullerton, Calif., both manufacturers of tubular steel furniture for the home; Frederick Hart & Co., Poughkeepsie, N. Y. electronics equipment; and Daystrom Laminates, Inc., Daystrom, N. C., producer of laminated hardwood.


Safety at the Floor Level (From page 31)

non-slippery. Many rubber flooring compounds of varying qualities have been developed. Rubber flooring may be made conductive for use in locations where static is a problem as in hospitals and explosives manufacturing plants.

For mercantile establishments, laboratories and workrooms where traffic is comparatively light, linoleum, asphalt tile, magnesite and terazzo are frequently used. In many locations maintaining a non-slippery surface for pedestrian traffic requires constant attention since the public has learned the possibilities of cashing in on a fall.

The spillage of oil and other liquids creates slippery conditions under foot. Sometimes this spillage cannot be prevented. Racks or pans can often be placed to catch the drip. Oil absorbent compounds kept on hand and sprinkled on the floor when spillage occurs will help safety and housekeeping. Most commercial compounds are non-flammable and more effective than sawdust.

In some establishments maintenance involves wax floor finishes, both for appearance and to protect the floor surface. Floor waxes on the market fall into two general classifications: Paste and liquid waxes containing volatile organic solvents, and the water emulsion waxes. The protective film formed by these waxes is often slippery. In both types of waxes there is a wide difference in friction provided by the surface. This is attributed to special ingredients which reduce the slipperiness of the waxed surface.



On the surface they look alike—

ON THE JOB THERE'S A BIG DIFFERENCE!

5 TO 15 TIMES
GREATER LIFE

TENSILE STRENGTH:
125,000 LBS. PER SQ. IN.

YIELD POINT:
90,000 LBS. PER SQ. IN.

1 3/4" ALLOY STEEL CHAIN

1 3/4" WROUGHT IRON CHAIN

SHORTER LIFE

TENSILE STRENGTH:
40,000 LBS. PER SQ. IN.

YIELD POINT:
25,000 LBS. PER SQ. IN.



This ring is welded on all TM Alloy Steel Sling Chains. It bears the chain's serial number and safe working load limit. In effect it says: "When your lifting requirements are big and your present chain performance leaves something to be desired—it's time to switch to TM Alloy Steel Chain." It's tougher...safer and far more economical than ordinary wrought iron chain. Used by steel, automotive, petroleum, marine and manufacturing industries generally, because *comparison, experience and costs proved its superiority*. For all the facts, write today for free copy of new booklet, "TM Alloy Steel Chain". The S. G. Taylor Chain Company, 97 141st St., Hammond, Indiana.



See your Mill Supply Distributor or send today for free copy of new TM Alloy Steel Chain Booklet!

TAYLOR MADE
A GREAT NAME IN
Chain SINCE 1873

The Panel Discusses Safety Meetings

(From page 27)

chosen, naming one for each shift in each department as far as practicable. A chairman and a secretary are elected annually in some committees and semi-annually in others by the committee members at a regular meeting. The policy is to have an hourly man act as chairman and to change both the officers and other personnel of the committees periodically in order to spread the experience.

The meetings of the labor-management committees are held in the evening outside the plants. There are six separate committees in our organization—four in one location and one each in two others. The regular meetings are held during the month following the end of each quarter-year, and begin with a dinner paid for by the company. Also one intermediate meeting following each quarterly dinner meeting may be held in the evening without the dinner. This permission is taken advantage of by two of the six committees.

Another of the committees requested and was given permission to hold monthly meetings in the evening without dinner, as they felt they were able to keep closer contact with the supervisors in that manner. Some leeway is allowed in the character and scope of the meeting agenda, but minutes are kept and parliamentary rules are followed. Management is called on to make a report of the action that has been taken on suggestions offered at the previous meeting regarding physical and health hazards. Reports of frequency rates of departments and competing divisions are made.

Occasionally talks by invited guests are given.

So much interest is taken in these meetings and so many subjects come up for discussion that there is usually no time for so-called aids. These have been found to be mostly elementary in

character with not much appeal to our men. Once in awhile a motion picture or soundfilm is shown, but we have found that the best "aid" is across-the-table discussion properly controlled by the chairmen.

The best number in attendance for constructive discussion and action appears to be between 20 and 30. Our committee activities are given credit for reducing our frequency rates drastically in the last six years.

MR. GARDNER:



on a monthly basis.

The employees' safety committee is usually made up of one person representing each department in that plant. The meetings are held the first week in the month and the safety director acts as the chairman.

Each member of the committee is asked to make a list of unsafe acts and unsafe conditions in his own department. These are written up in the minutes. Copies of the minutes go to the plant manager, the department heads, the safety director and the nurse. The safety director follows up on all these recommendations.

New members going on the committee are given the following National Safety Council materials; *Shop Safety* booklet, and Safety Instruction Card No. 341, *Safety Committeemen*.

This card gives the new member a list of his duties. The *Shop Safety* booklet gives him a bird's-eye view in pictures of the whole safety program.

After the committee is functioning smoothly we try to keep the meetings interesting by the use of

safety movies, sound slide films, demonstrations and outside safety speakers. Most plants have an annual banquet or picnic for the safety committee.

The supervisory safety meetings are held after the employee's safety committee meeting or during the third week of the month.

First aid, doctor's cases, and disabling injuries are discussed at this meeting. Charts showing the frequency and severity rate of other company plants are usually presented. The last half hour is a safety slide film or movie. We have found the "Human Factors in Safety" slide films to be excellent for this type meeting. Demonstrations and short talks on safety and housekeeping by name speakers have also helped to make these meetings interesting as well as educational.

MR. KLEMME:



Our producing field operations are divided into large areas, each of these is divided into sub-area groups. These sub-area groups hold weekly safety meetings. The immediate supervisor is charged with the responsibility of planning and conducting these meetings. They are held on company time and usually the first thing in the morning before employees go out on the job.

In the drilling department, we have round-the-clock operations. Each 8-hour crew holds a weekly safety meeting. The driller or tool pusher has the responsibility in conducting these meetings.

In our gas plants and refineries, weekly safety meetings are held which include the entire plant personnel. The plant superintendent designates in advance a supervisor who will plan and conduct the meeting.

Our exploration department, geophysical operations, hold safety meetings bi-monthly. They include all of the personnel of the par-

—To page 87

George Burns Honored For 25 Years' Service

GEORGE BURNS, manager, Service Department, NSC, received a gold watch and the best wishes of the Council cabinet in recognition of his 25 years as a staff member during a surprise visit to the Council's new quarters on Michigan Avenue a short time prior to moving day. It seemed a most appropriate choice as a spot in which to honor Mr. Burns as the detailed



President Dearborn, NSC, (right) presents George Burns with watch for 25 years' service as a staff member.

planning of the move and the remodeling of the new offices had been his major concern for many months.

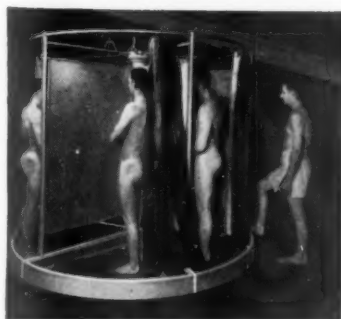
Mr. Burns joined the Council in 1925 following five years of service as a safety engineer with Liberty Mutual Insurance Company in Boston and Chicago. He began work in the Industrial Department and was later appointed assistant director of the department. One of his principal assignments was the management of the annual National Safety Congress, a job that has been his ever since.

In 1940 Mr. Burns was made business manager, and following the reorganization of 1943 he became head of the Service Department.

In accepting his gold watch, Mr. Burns became the eighth member of the Council's "25 year" club. The other staff members who have been with NSC for 25 years or more are: Sidney J. Williams, assistant to the president; G. O. Lindquist, director, Purchasing Department; H. H. Greenwald, director, Accounting Division;



INCLUDE SHOWERS IN THE MODERN WASHROOM



● Alert plant executives know that sanitary wash facilities, to be complete, should include showers. Efficiency and employee morale are definitely improved when the convenience of clean, health-protecting showers is made available.

Bradley Multi-Stall Showers combine the benefits of economy and easy installation with sturdy construction and maximum sanitation.

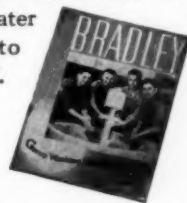
Available in 5- or 3-Stall Units, Bradleys can be quickly installed in either old or new buildings, on any kind of floor including wood. Bradleys have no corners or dark areas to collect dirt, and upkeep requires a minimum of attention.

For further details on how Bradley installations reduce the number of piping connections needed, cut hot water costs and reduce water consumption, write to **BRADLEY WASHFOUNTAIN CO., 2237 W. Michigan Street, Milwaukee 1, Wisconsin.**

Distributed Through Plumbing Wholesalers

BRADLEY

multi-stall showers



Illustrated Catalog 4701 includes helpful layout suggestions. - a copy sent promptly upon request.



**WORKERS
DON'T FALL DOWN
ON THE JOB WITH
MULTIGRIP
UNDERFOOT**

● Wet or dry, U·S·S Multigrip Floor Plate assures safe footing for workers and positive traction for vehicles. Comfortable underfoot, it tends to reduce accident-causing fatigue, increase efficiency. The sloping sides of Multigrip's flat-topped risers make it impossible to catch the toe of a shoe on them. And there are no gutters to catch a narrow-wheeled vehicle.

Multigrip increases the life of plant flooring, decreases maintenance costs. And the symmetrical design minimizes waste in cutting . . . neat installations can be made at a minimum cost.

For economy, easy cleaning, *safety* . . . you can't beat U·S·S Multigrip Floor Plate. Get complete information about non-skid Multigrip from your nearest steel warehouse or write to us direct.

Carnegie-Illinois Steel Corporation, Pittsburgh and Chicago
Columbia Steel Company, San Francisco, Pacific Coast Distributors
Tennessee Coal, Iron & Railroad Company, Birmingham,
Southern Distributors

United States Steel Export Company, New York



MULTIGRIP FLOOR PLATE

UNITED STATES STEEL

Grace Allen, assistant, Membership Department; Gene Parks; assistant, Executive Department; Carman Fish, editor, *NATIONAL SAFETY NEWS*; Bernadette A. Lanouette, director, Stenographic Bureau; and Kathleen Smith, chief switchboard operator.

For Distinguished Service

(From page 54)

rate 39 per cent in 1949 as compared with 1948. The plant operated 3,019,652 man-hours without a disabling injury from March 14, 1949 to January 27, 1950. Award presented to J. O'Brien, president, Teletype Corp. by D. Levenger, vice-president of the Western Electric Co., and vice-president of the Greater Chicago Safety Council on April 28, 1950.

Tennessee Copper Co.

Copperhill, Tenn. — Injury frequency rate reduced 38 per cent in 1949 as compared with 1948. The 1949 injury frequency rate only 10 per cent of the group average—injury severity rate but 37 per cent of such average. Award presented May 8, 1950.

Warner Co.

Van Sciver Plant, Tullytown, Pa.—For operating without a disabling injury from July 23, 1947 to December 31, 1949. Award presented by the Philadelphia Safety Council.

Western Electric Co., Inc.

Radio Shops, Burlington, N. C. —For operating without a disabling injury from September 29, 1948 to February 23, 1949. Award presented May 18, 1950 by John S. Cuthbert, field representative, Eastern Region, National Safety Council.

Weyerhaeuser Timber Co.

★

White River Branch, Enumclaw, Wash. — The 1949 injury frequency rate was only 51 per cent of the group average — injury severity rate but 12 per cent of such average. Injury frequency rate reduced 27 per cent in 1949 as compared with 1948. Award presented May 26, 1950.

SKIDS

(From page 29)

ing skids from trucks is much the same as that for unloading freight cars. The floor of the truck should be inspected for nails and for weak floor boards or roughness which might upset the load. If the truck can be entered with motorized equipment, one man can do the job. At least two men should move a heavily loaded skid if a hand truck has to be used.

13. Particular care has to be used in securing dock plates and in keeping loaded skids in balance on inclines. Printers receiving loaded paper skids by truck commonly face the problem of getting paper onto docks which are several inches higher or lower than the truck bed.

14. This problem can be handled with the use of skid boards 30 inches by 78 inches by 1½ inches, tapered at both ends and at both sides. One end can be equipped with iron hooks that fasten to the rear end of the truck bed. By using chock sticks, three men can deliver a heavily loaded skid to docks at lower level. However, considerable training and careful coordination are necessary if accidents are to be avoided.

15. Many of the hazards of truck unloading can be removed by the use of self-leveling or hydraulic dock ramps.* Dock plates can adapt themselves to the height of the truck as its load is removed. Unless the truck is headed up an incline, wheels should be blocked. If the same make and size of truck is always used for delivery, a loading shoe can be used to raise and hold the truck bed to the same level as the dock.

16. In so-called "sidewalk delivery" of loaded skids, the printer usually is not responsible for

getting the loaded skid from the truck to the sidewalk. Winch or hydraulic tail gate trucks are frequently used for this operation.

17. To remove the loaded skid from the sidewalk to the plant, the principles of handling discussed in this data sheet can be used (paragraphs 22 to 24).

18. The user of smaller quantities of paper who may be con-

and block lifts must be nailed to the runners. Separate blocks will compensate for uneven floor surfaces.

20. Loose blocks should not be placed under skids. They will not remedy the defect of the low skid, and they will greatly increase the danger of upset loads.

21. It may be necessary with extremely low skids to slide a long heavy plank under the whole load and then jack up one end of the board to get under the runners with a truck or a jack. Every

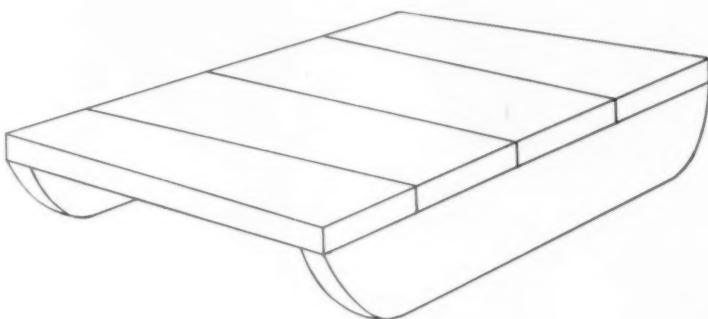


Figure 4. Users of this type of skid claim reduced injury because of flush sides and greater maneuverability. See paragraph 45. (Courtesy Rand McNally and Co.)

sidering the purchase of mechanized equipment should consider the advantages of such a move so far as his safety program is concerned. He should carefully weigh the economies of mechanized handling, in terms of both reduced accident losses and improved efficiency, before rejecting such mechanization on the basis of cost.

19. Occasionally flat paper is delivered on skids too low for trucks to get under.** Unless the loaded skid can be handled with a fork truck, it must be jacked up

effort should be made to avoid the necessity for such dangerous handling. If it must be done, it should be assigned only to experienced men.

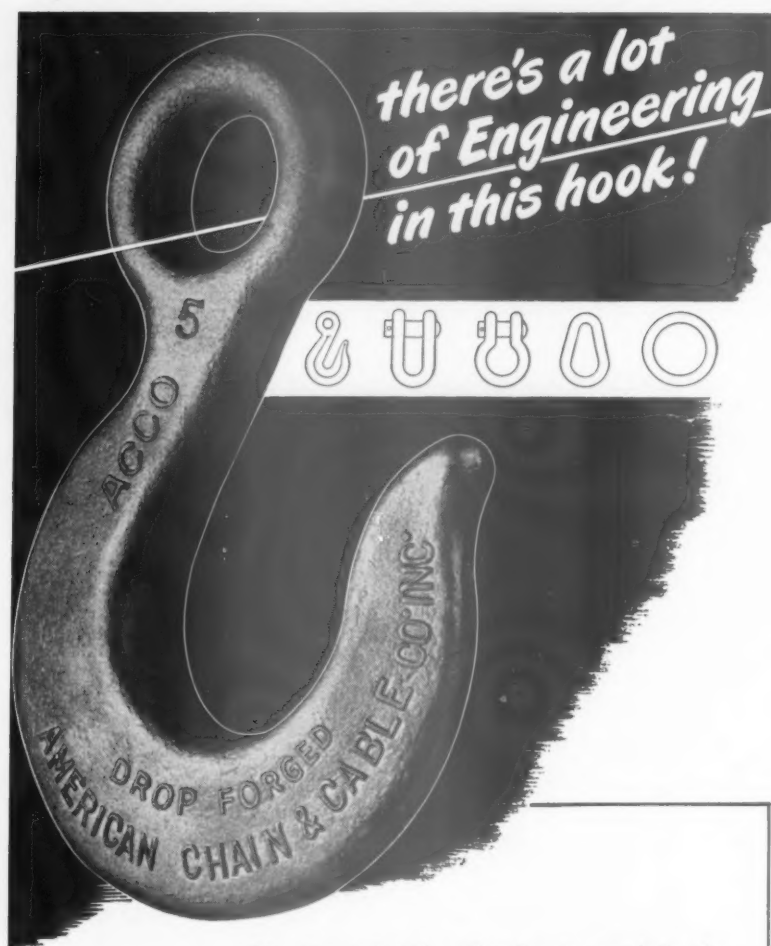
Inplant Transportation

22. Once the loaded skid is on the hand or fork lift truck, the problem becomes one of inplant transportation. Well secured dock plates, careful maneuvering of the truck, observance of usual driving precautions minimize the hazard of upset loads and personal injury.* Dock plates should be especially designed for unloading

** Printing Industries of America suggests for paper skid handling a 7-inch platform truck. A recommendation is currently being developed which will specify a skid with 7½-inch to 8-inch runners 3 inches wide, with 1¼-inch deck boards.

* For detailed source of information on general handling of materials by truck, see the catalog of National Safety Council technical publications (Service Guide 2.1) or Printing and Publishing Service Guide 128.1.

* Further information about such docks may be obtained from the National Safety Council.



Most people take sling hooks, grab hooks, shackles—chain fittings of one kind or another—pretty much for granted . . .

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paper skids, not improvised from dock plates designed for general use. Plates should be strong enough not to sag, and preferably should be wider on the dock side to prevent the skid truck from running off the edge as it turns.

23. Handlers must be instructed to pile loaded skids with the greatest of care for alignment, and to inspect skid runners to see that they are securely fastened to the platforms and are lined up with the loads on which they are piled.

24. When the sides of loaded skids face an aisleway, the row next to the aisle should be limited to one skid high. If the first row has more than one, the upper skids can be knocked off by trucks out of control, by the collapse of runners, or by other circumstances. Such accidents have caused serious injuries.

Stripping in the Plant

25. In removing banding strap from the skid load the worker should take the same precautions as those used in unfastening loads from box cars. He should wear goggles, safety shoes, and reinforced gloves. He should grasp the “free” end of the strap with one hand, and cut low to a bind point. He should stand sideways so that flying strap cannot strike him, and should likewise make certain that other persons cannot be hit with flying strap.

26. One way to reduce the hazards of cuts from sharp banding strap is to specify that the rounded type of strap must be used on flat paper supplies. Furthermore, the purchasing department can require that shipments of paper be put on skids of specified dimensions, thus helping to standardize procedures in the plant.

27. Strap cutters, not hammer claws, pinch bars or hatchets, should be used for cutting strap. Makeshift tools put added and uncontrolled tension on the banding material and should not be used. Most manufacturers of steel strapping can furnish cutters designed for their product. Some of them leave rounded ends, thus reducing the hazard of sharp edges.

28. Strap should be cut square, never at an angle. Angle cutting leaves sharper ends.

29. Unless quantities of strap are so small that they can be carried at once to a central storage or disposal point, a skid box should be provided for the disposal of strap and scrap wood, even at the sacrifice of some floor space. If the use of a skid box for strap is not possible, the metal should be immediately bound and taken to a central disposal place. Firms handling a large volume of paper frequently provide one skid box for scrap wood and another for bands.

30. If disposal containers must be emptied by hand, the men doing the work should wear gloves and goggles. If the quantity of strap justifies mechanical handling and dumping, the hazards will be fewer.

Skids at the Press

31. The prevention of accidents with skids being loaded for press feeding is largely a matter of inspection and maintenance of the hoists, which should be checked periodically for defective mechanism.

32. All persons handling skids should wear safety shoes and should keep toes and feet out from under skids that are being raised or lowered.

Handling Empty Skids

33. Handling the empty skid (runners plus platform) requires two men, whether the job is one of stacking, permanent disposal, or moving for a short distance. Figure 2 shows a simple type of dolly used to eliminate the practice of dragging skids.

34. Empties to be discarded should be handled with trucks or dollies if they are to be taken any distance.

35. The handling of discarded skids as scrap needs good supervision and training. It is not an unskilled job which should be left to the personal judgment of the men who are to do it. The risk of fire, and of injury from nails, splinters, and bad piling requires that skid disposal be a planned operation.

36. Skids which are to be kept



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for further use should be carefully inspected and maintained. Protruding nails and splinters are a common cause of injury, not only to handlers, but to passers-by, who frequently slash their legs and feet on them. Skids not kept in shape likewise are a prolific source of damage to stock.

37. Broken or defective skids which are to be kept in service should be sent at once to the shipping room for repairs, and then stored.

38. When a department in one plant needs skids, a call is sent to the shipping room and loads of good skids are delivered. Foremen and subforemen in each department are responsible for seeing that the proper skids are used. All skids coming into the plant which do not meet the standards for continued use are destroyed.

39. Empty skids should be stacked not more than 4 feet high. Lifting a skid higher than 4 feet requires exertion far out of proportion to the value of the space saved. Muscle strain and hernias are the usual types of injuries resulting from such lifting.

40. Skids should be stacked flat, one up and one down, and alternating so that the pile is stable. They should never be left standing on edge.

41. Skids should not be dropped. Noise not only distracts employees from their work (it has been known to cause injury by startling people at work on machines), but dropping may damage the skid, causing particles of broken wood to fly, or the skid may bounce and strike employees.

42. In shops where separate runners and platforms are used, the platforms are stacked not more than 32 high, and are usually put flat in a rack. Instructions are given workers on how to pull platforms off the rack. (See Figure 3.)

Skid Disposal Control

43. The problem of keeping proper sizes and quantities of skids in the proper departments may be solved with a color-coding system. In each department a sign with bands of color can be

prominently displayed, each band labeled with the name of the department which is "home base" for skids of that color. This control system helps eliminate the piracy of skids, and reduces the use of non-standard sizes for departmental needs.

44. Another plant cuts up all non-standard skids as they come in and rebuilds or discards all skids not within the specified size range.

45. Certain advantages are claimed for the skid shown in Figure 4. The firm which uses these skids says that since the runners are flush with the outside, men do not get their toes under the skid nor bump into the sides, and less damage is done to paper and to finished stock. It is also said that this type of skid affords greater maneuverability because trucks handling these skids can get into closer space. The skids have been built as wide as 44 inches with the runners flush. They can be obtained from the paper supply houses if specified.

Paper and Metal Foot Skids

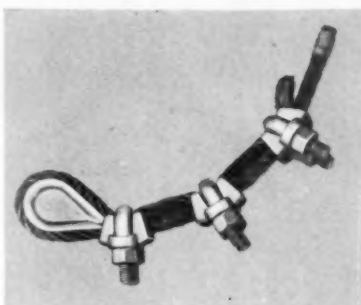
46. The use of disposable paper skids (skids comprising a platform and tightly rolled corrugated paper feet) eliminates the nail and splinter hazards of the wood skid. However, paper skids are more susceptible to damage, and if damaged can be hazardous when piled loaded. If a paper skid is loaded with cartons unevenly filled with printed matter, the lower sections of a tier may tilt and cause dangerous off-balance of the upper cartons.

47. Paper skids must be handled with greater care than wood skids, must be kept dry, and the foot sections must be constantly watched for damage, particularly in the case of loaded skids which are to be piled.

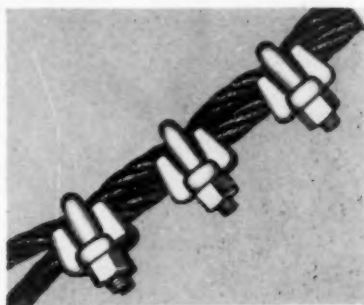
48. Platforms with steel feet are reported on unfavorably by some large users of paper. Although maintenance is lower, first cost is higher and empties are heavier. Constant use may give the ends of the angle or channel iron foot a knife edge, and the end boards are frequently splint-

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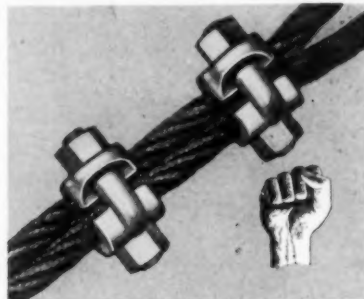
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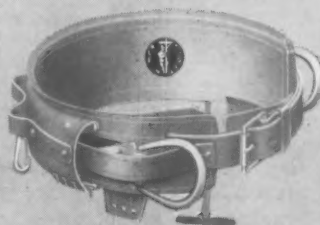
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ered or broken out. Employees have received severe lacerations of the shin from walking into metal skids in poor condition.

ACKNOWLEDGMENT

This data sheet was prepared by the Executive Committee of the Printing and Publishing Section, National Safety Council. It was reviewed by the Safe Practices Conference Committee and approved in final draft by the Industrial Conference of the Council.

Industrial Fire Control

(From page 23)

grown to large size to protect tanks of flammable liquids, pumps, and piping and other types of process equipment in the petroleum and chemical industries and has also been used for the protection of electric transformers, oil switches, and the other complicated switch gear of large electrical sub-stations. In this connection it should be noted that while an attempt is always made to shut off electrical current in order to limit damage in such installations, water spray from fixed equipment may be used with safety on live electrical equipment of the type usually found in outdoor substations.

Although a water spray in itself is relatively non-conducting, the use of portable equipment in the vicinity of live electrical equipment is in itself hazardous and is not advised, but fixed systems may be readily employed for such electrical uses.

The use of water spray for such large chemical and petroleum installations requires very large amounts of water, usually requiring special pumping provided for this purpose.

The second committee of the Special Extinguishing Project is the Carbon Dioxide Committee, which in addition to standards for the use of carbon dioxide for fire extinguishing also has jurisdiction over the use of inert gases for fire prevention, a relatively new and important development.

In the extinguishing field, perhaps the newest development is the extensive research work which has been done on fur storage vaults. Numerous fire tests have



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been run which indicate that the damage is principally caused by smoke and that a very large amount of carbon dioxide is necessary to extinguish a smoldering fire in fur.

Glowing Fires

Glowing fires in fibrous materials are difficult to extinguish by an inert gas as they require much less oxygen than a free burning flame. As a result of tests it has been found that one pound of liquid carbon dioxide is required for each six cubic feet of vault volume in order to secure positive extinguishment. Experiments with detection devices have indicated that with this smoky and very slow starting fire the use of various types of electric eye devices is essential to control.

Because of the life hazard from flooding a vault with carbon dioxide, thus excluding air, an alarm period can be provided. However, this is such a slow fire that a five-minute period for escape can readily be provided without the danger of increasing smoke damage. If employees are in the building it is usually possible to enter the vault and remove any burning garment, avoiding the necessity for tripping the carbon dioxide system.

One essential in handling such a fire is to allow the carbon dioxide time to work. A half-hour is absolutely required, an hour or hour and one-half are better, but you can imagine how difficult it is to keep owners and even the fire department from wanting to enter the vault almost immediately.

In the fire prevention field inert gas has been used to keep mixers in chemical plants and even all of the storage bins, conveyors, blenders, and other equipment handling dusty products completely filled with an inert atmosphere, thus preventing any possibility of dust explosion. One important feature of this type of equipment is the development of gas analysis equipment which will indicate any gas or oxygen concentration and controls which will insure the maintenance of this gas atmosphere throughout the entire equipment.

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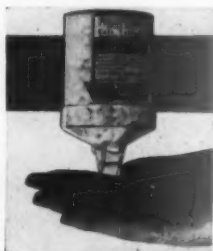
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this type is at the Tennessee Eastman Corporation. In one structure, 33 bins or silos, each about 100 feet high and 20 feet in diameter, are kept continuously filled with inert gas together with all the conveying equipment. These bins contain powdered cellulose acetate which when finely divided and suspended as a dust cloud could produce a severe dust explosion if ignited by a flame or a spark. As all of the equipment is filled with an inert gas, however, a possibility of an explosion is eliminated.

The third committee, under the chairmanship of Fred Trask of the Oil Insurance Association in Chicago, deals with the standards of foam protection and is this year offering to the Association a completely new standard based largely on the experience gained by our Navy during the war.

For many years foam was recognized as a material especially suited for use on oil fires.

Because foam leaves a sloppy residue hard to clean up and which may cause damage to many materials and because it was not suited to fires in alcohol and similar materials which dissolve foam, there has been a tendency to think of foam as somewhat of a back number of little interest to anyone except the oil man with a large oil storage problem.

Recent developments, however, have shown that foam is by no means a back number. In fact, it is one of the most useful and rapidly developing fire extinguishing means available today.

Chemical foam which we have had for many years is produced by a chemical reaction which forms carbon dioxide gas in the presence of a foaming material so that a froth is built up consisting of tiny gas-filled bubbles.

Mechanical Foam

The newer development is a so-called mechanical or air foam in which a froth is built up by the use of a water solution of a foaming agent without chemical action, the bubbles being air filled. Whether the bubbles are filled with air or carbon dioxide makes no difference in the effec-

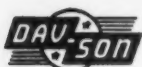
PLANT ACCIDENT FACTS				
1. JAN 10 NOV 15	LOST	MAJOR		
2. 1944	TIME	FIRST AID		
3. DEPARTMENT	DATE LOST	TOE OTHER		
4. STAMPING DEPT	2	24	0	3
5. DRILL & SCREWS	1	17	3	1
6. LARSEN DEPT	4	58	2	0
7. ASSEMBLY DEPT	2	31	0	1
8. WELDING DEPT	5	37	0	2
9. MACHINE SHOP	4	50	2	1
10. MAINTENANCE	3	45	3	0
11. FORGE DEPT	5	56	2	4
12. YARDS & STOCK	4	25	0	3
13. ELECTRICAL DEPT	3	58	3	1
14. SHIPING DEPT	2	55	1	0
15. CRANING DEPT	6	101	3	0
16. FINISHING DEPT	4	56	2	1
17. FOUNDRY DEPT	5	172	3	4
18. TOTAL	53	704	32	20
19. PLANT AVERAGE				
20. FREQUENCY 0.64		SEVERITY 88		

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tiveness of foam, which extinguishes by covering the protected material with a blanket which excludes air.

One point not generally realized about foam is that it may be required to stand up against the heat of a terrific fire in, let us say, gasoline. No light froth is going to stand against such a fire. Recent experiments have indicated that the ability of foam to withstand fire is indicated by the amount of water which the foam blanket carried with it. The new standards are, therefore, based on the amount of water carried in the foam blanket, and the rate of application is defined in terms of gallons per minute of water per square foot of surface to be covered.

Different types of foam have different expansion ratios, some building up a much thicker blanket from a given amount of water than others, but in any case the effectiveness is measured by the amount of water carried in the foam rather than the total thickness of any blanket that could be formed.

The newest development in foam is a type of foam which does not break down in contact with alcohol and similar materials. The development of this foam has greatly extended the application of foam in the chemical industry.

Foam, like water spray, can be used effectively for the protection of equipment against an exposure fire and for control purposes where the equipment is kept cool but the fire itself allowed to burn relatively harmlessly.

While foam is ordinarily and best applied gently through applicators which flow the material onto burning liquids or over the surface of protected equipment, it can, if necessary, be applied through nozzles of various types. This type of application sometimes (and improperly) called fog foam can be used to cover the surfaces of equipment with an insulating blanket, protecting it against exposure fires as fluid foam readily flows over irregular surfaces and is quite effective in protecting equipment from really severe exposure fires.

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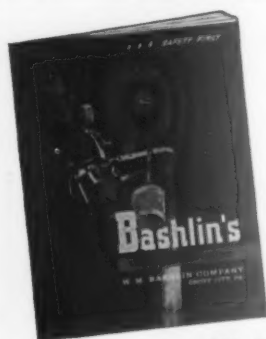


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Special Extinguishing Project are those for wetting agents, first aid extinguishers, and vaporizing liquids.

The Vaporizing Liquids Extinguisher Committee does not write standards but is simply an informational committee which makes studies on various vaporizing liquids such as carbon tetrachloride, chlorobromomethane, and methyl bromide, which have been used for fire extinguishing purposes, both in connection with their effectiveness for fire extinguishing and for the possible life hazard involved in the use of these toxic chemical compounds.

Methyl Bromide

At the present time there are no practical new developments in this industry although the British have made effective use of methyl bromide for aircraft fire protection in the engine nacelles. Because of the extremely toxic nature of this material, it is not suited for industrial use but may appropriately be used in aircraft in a unit type of installation so that the material is confined entirely to the engine nacelle with no possibility of its entering the passenger or crew compartments.

Chlorobromomethane is a comparatively recent material used in this field which is comparable to carbon tetrachloride both in effectiveness and in toxicity.

The work of the National Fire Protection Association in first aid extinguishing devices for many years has been part of the work of the Committee on Field Practice. It has now been established as a separate committee on first aid extinguishing devices coming within the general scope of the Special Extinguishing Methods Project and under the chairmanship of C. J. Koskinan of Underwriters' Laboratories.

There are no developments in this field which can be considered as really new. Even the most recent development, the dry powder extinguishers, has been with us a number of years. There have been recent developments in the dry powder extinguishers, however, and a number of new types are available. This extinguisher is particularly effective on spill fires

of flammable liquids and has the advantage of greater range than the carbon dioxide extinguisher. When used in conjunction with water spray, it has been quite effective on some types of flammable liquids fires. This application is quite new and has not yet been thoroughly investigated.

Wetting Agents

The most recent development in fire extinguishing and one which has caused a great deal of interest over the entire country is that of the use of so-called "wetting agents" in water to produce a low surface tension causing the water to flow readily over surfaces and to enter crevices and to penetrate materials deeply.

Wetting agents are not at all new; ordinary soap is one example and we all know the effectiveness of soap in getting your hands thoroughly wet. The wetting agents used in fire protection do not provide a froth of soap suds; in fact, such a froth would interfere with the effectiveness of the

material for fire extinguishing purposes.

For fires in fibrous materials, the use of a wetting agent may add appreciably to the effectiveness of the water as it allows it to penetrate and cool surfaces which would not otherwise be touched.

The effectiveness of these materials has been demonstrated in forest fires where the wetting agent permits the water to thor-

oughly wet down the light duff of the forest floor.

Because of the rapid development of the use of this material, many conflicting stories are told and many advantages claimed for different types of wetting agents. Our new committee, under the chairmanship of Donald Knapp of Bethlehem Steel, however, has prepared a standard which has been adopted as a tentative standard, covering this subject in de-



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PROBLEM—An outdoor ramp, subjected to weather, dirt, grease and hard use from heavily loaded trucks and busy feet.

SOLUTION—More than 3 years ago, **FERROX** abrasive compound was troweled onto ramp surface, at very low cost. Still giving good traction and sure footing today, under constant use.

FERROX is easy to apply . . . Simply trowel on danger spots . . . One gallon covers 40 square feet . . . Dries over night . . . Firmly embedded abrasive particles provide good traction and sure footing under wet, dry or oily conditions.

Send today for folder describing uses on many danger spots and illustrating how easy **Ferrox** is to apply, or phone Bob Easty, ESsex 3-7060.

*Reg. U.S. Pat Off.

**AMERICAN
ABRASIVE
METALS CO.**
466 COIT ST., IRVINGTON, N. J.

☐ Please send me your illustrated **FERROX** folder.
☐ At no obligation, please have one of your Sales Engineers call.

Name _____ Title _____
Company _____
Address _____
City _____ State _____

NSN-6-50



**HI-WAY
TRAFFIC
SIGN**

ALL METAL

•

**DURABLE
CONSTRUCTION**

•

**HIGH
VISIBILITY**



**The
SILENT
WATCHMAN**

Standard equipment with many electric service and telephone companies . . . High visibility. 19" wide by 30" high. Folds compactly for storing. Double faced sign plate as illustrated.

Write for
Bulletin K-60



INDUSTRIAL PRODUCTS COMPANY

2850 N. FOURTH STREET PHILADELPHIA 13, PA.

tail and giving factual material on which its actual fire fighting use may be based.

The wetting agent in itself does not extinguish fires. It simply aids our oldest and most effective extinguishing agent, water, in penetrating and cooling. It is of practical value where water supplies are limited as in the forest fire situation, and rural communities where water is carried on fire trucks. It is also effective in deep-

seated fires in fibrous materials, as in cotton bales, waste paper or such ordinary and familiar items as upholstered furniture.

There is one word of caution on wetting agents. In general, they tend to increase corrosion and, in particular, should not be stored in galvanized tanks as most of them attack zinc rapidly. They may be kept in special corrosion resisting tanks or the wetting agent may be carried to the fire scene

in a glass container and added to the tank on arrival at the fire, washing the tanks thoroughly with plain water after use.

This is a brief summary of the new developments in fire extinguishing methods. I would suggest that those using or considering the use of these materials read the appropriate standards of the N. F. P. A. As new standards are developed they tend to become more complex. There are frequent demands for a simple standard or for perhaps a simple universal fire extinguishing method.

Unfortunately, however, as our industry develops, the fire problems multiply and become more complex, new extinguishing devices and methods are developed, and as we learn more, the whole subject grows more complex. There is no simple answer to the fire problem and the growing complexity is merely a symptom of the growing complexity in our technological development where-ever encountered.

Modernize your present belts with **SAFE-HI Shock Absorbers!**



Get the **added safety** of Unolyn Shock Absorbers without discarding your present supply of construction workers' belts.

Built of doubled Unolyn webbing and fitted with D-ring and link for attaching to your present belt.

The Unolyn Shock Absorber **PUTS ON THE BRAKES** and stops a falling man gradually because of its amazing ability to stretch under loading—and stay stretched.

**ASK TODAY FOR COMPLETE INFORMATION
...FROM YOUR SAFETY APPLIANCE DEALER
OR THE MANUFACTURER**

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Products

**SAFETY BELTS
LADDER SHOES
POLE GRIPS
WALL GRIPS
LIFE LINES AND
LANYARDS
CHISEL GRIPS**

ROSE MANUFACTURING CO.

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Safety and Service Emblems

Fewer accidents mean more manpower. Safety Emblems for various lengths of "no lost time" service instill the competitive spirit necessary for employee cooperation. Service Award Emblems for 1, 3, 5, 10, 25 and 50 years of continued employment increase loyalty and reduce labor turn-over. Easily seen and readily recognized emblems such as those illustrated above are paying big dividends in many large plants. Also Identification Badges, Plaques, Athletic Medals, Trophies, etc.

Write for new catalog!

METAL ARTS CO., Inc.

Dept. 10, Rochester 5, N. Y.

Sound and Fury

(From page 39)

to my own staff. I didn't want to admit to Larson that I was a boob. So, as I usually do when I'm in trouble, I gravitated up to the research lab to talk to Doc Moller.

He heard me out, laughed at my description of the interview with Roscoe, and then leaned back to hand out the advice.

"Vun, you are a *dumkopf*, vich you know. Two, maybe it is not so bad to be a little dumb sometimes. This time, maybe it is not at all bad.

"Look, you got something. You got, anyway, a good excuse to review the piece about safety after they rewrite it. Maybe not clearly, but enough of a suggestion so you can make Bill Jordan clear with you. Because Joe vill not haf made it very clear to him, either, who is to do vot.

"So, on vot is important you fight very hard. This tripe about 'best, best, best' you get out, and make Jordan put in other words that sound nice and are even a little true, because you do haf a story about safety vich can be some brag, no?

"On vot is not important, you do not mind. Maybe, even, you could flatter the advertising boys on vot doesn't matter, so they love you a little."

"Okay," I said, "but there's still the matter of the estimated reduction. With the recommendations to be considered *after* we stick our necks out."

The Doc pretended to look sad, but there was a grin on the edge of his frown.

"Whose neck?" was all he said.

"Mine!" I said.

Doc shook his head.

"Joe Roscoe's, then, and the company's," I growled.

"No-o. Partly, Joe and Bill Jordan are right. This is something you call ballyhoo, is it? Nobody remembers, nobody checks up. It is to impress people who do not think. It is not a report to a board of directors, because Claude Jackson is really the board and he knows better. It is, I think, for the crowd to make them love us a little.

DON'T SHUT-DOWN MACHINES FOR FREQUENT GLOVE CHANGES!



USE JOMAC LONGER-LASTING WORK GLOVES



FLEXIBLE • REVERSIBLE (FIT EITHER HAND)

HEAT-RESISTANT

7 Times the Wear in Every Pair

JOMAC WORK GLOVES

C. WALKER JONES CO.

6137 N. Lambert St.

Philadelphia 38, Pa.

SPECIALIZING IN "BETTER-BUILT" HEAD & EYE PROTECTION FOR OVER 25 YEARS

There is a DOCKSON distributor near you. Name on request.

Write for our complete safety equipment catalog.

Dockson
CORPORATION
3839 WABASH • DETROIT 8, MICH.

"But it is not just such *schmaltz*, because it will be read by you and me and the little people in the shop. And they and we—all of us—will be a little impressed by how important we are. And that Roscoe, he is no fool—not even a fool always about science. He says, 'Quotas work for sales. Quotas will work for safety.' Next he will try quotas on research and I will curse him for a *dumkopf* and a *schwein*, and, quite likely, I will

work harder and my boys and girls will work harder and make his quotas.

"So, maybe he gives a quota for safety, and you can make foremen and workers behave better and maybe make the quota and save some broken bones."

"And if I don't?" I said.

"If you don't you have an alibi, because you will not get all your recommendations approved because they cost money and this

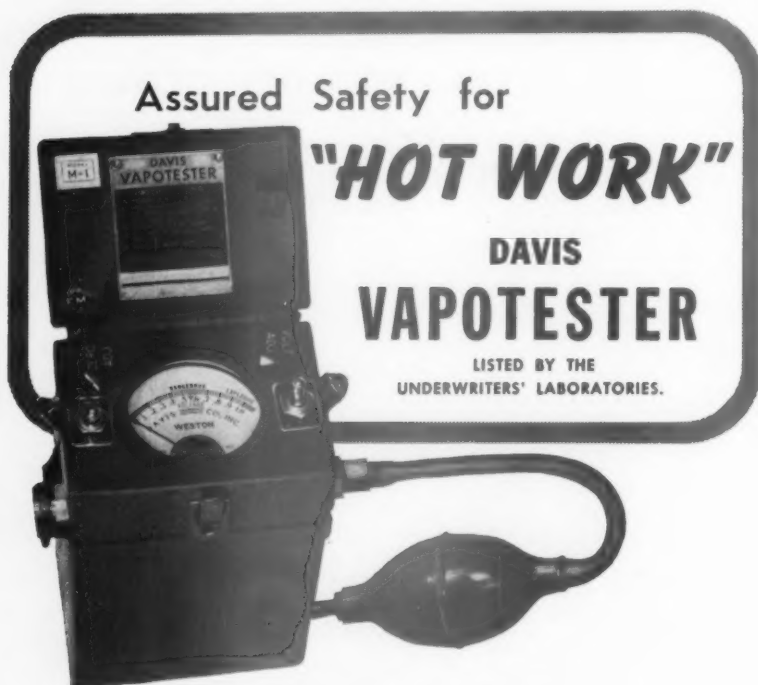
year we don't spend money without we beat the comptroller on the head.

"Joe has an alibi. They won't give him all the operating money he needs. The foremen have the best alibi, because it is out of their hands, but they won't know they have an alibi and you can put the pressure on them.

"Maybe, after all, Joe Roscoe has done you a favor."

Slowly, Doc's arguments are penetrating. I can see a campaign built around Roscoe's personal statement, as president, that we ought to cut accidents by 20 per cent. I can see some interdepartmental competition angles. And, maybe, I have a lever to get at least some of the recommendations through the executive committee.

Anyway, I think we ought to be able to expect a reduction of five or ten per cent from the cumulative effect of the safety program as now organized. Maybe, if we're very lucky, we'll even have a triumph and beat the hell out of that quota!



Assured Safety for

"HOT WORK"

**DAVIS
VAPOTESTER**

LISTED BY THE
UNDERWRITERS' LABORATORIES.

**Reads zero gas or vapor
to the lower explosive limit . . .**

Registers the presence of combustible gas or vapor.
Indicates gas-free conditions . . . instantly, unmistakably
—in enclosed vessels or manholes before men are
permitted to enter or "hot work" authorized.

Finds source of hazardous leaks. Used in refineries,
chemical plants, natural or manufactured gas plants, gas
or oil pumping stations and transmission lines, etc.

Approved by the Laboratories of the Associated
Factory Mutual Fire Insurance Companies
and listed by The Underwriters' Laboratories.

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EMERGENCY EQUIPMENT CO., INC.

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NEWARK 4, N. J.

SAVE with Oakite

SINGLE-SOURCE purchasing of cleaning materials means fewer products to order and stock; less paper work; dependable delivery; many other advantages.

That's why it pays to deal with Oakite. For Oakite offers more than 80 materials each designed to do a thorough job, whether it's cleaning of heavy equipment; de-scaling dish-washing machines, deodorizing wash-rooms, etc., etc.

And backing up these tested materials is Oakite service, with representatives as close as your telephone. So consult Oakite first and save!

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Technical Service Representatives Located in
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SPECIALIZED INDUSTRIAL CLEANING
MATERIALS • METHODS • SERVICE

I could get pretty excited about this idea. But there is one very real and very personal hurdle I have to get over first. It is this:

How do I sell this idea to my two key staff members? How do I show a straightforward, direct, intelligent, uncompromising guy like Jim Mason the route from the ridiculousness of the idea to its underlying sanity? And how, most particularly, do I convince a statistics-conscious analyst like Jack Bell that a percentage figure pulled out of the hat without any real basis in logic is a logical target?

(To be continued)

Feudin' Was Fun

(From page 37)

getting lower and lower, it was apparent that the feud idea was really catching on and getting results in making workers safety conscious.

Our 18th Annual October No-

Accident Campaign posed a problem. Here we had the Hatfields and McCoys in a nice state of belligerence. The question was how to continue the feud until the end of the year and still conduct an annual feature which had become a System institution. The answer came from the same source as the original feud scheme. Chief Dispatcher Clem Corey said, "Why not have the two clans declare a truce and join forces against their common enemy, Old Man Acci-

dent?" This became the October Campaign theme.

The September 15 announcement poster was a joint statement by Pappy Hatfield and Pappy McCoy calling the truce. (Page 36.) On October 1 the typical hillbilly, with houn' dog and jug, was shown on a poster just finishing a sign at the dam site reading:

On This Site During October the McCoys and Hatfields Will Join Forces and Build a Safety Dam on Accident Creek.

PROTECT EMPLOYEES

against

UNNECESSARY HEAD INJURY



Here, at last, is a light weight, plastic safety helmet, resistant to 3,000 volts of electricity, and by actual test, able to sustain 80 foot pounds under ball impact. What's more, the Paramount safety helmet is light as a feather—comfortable, waterproof, adjustable to head sizes (6½ to 8), and with enough clearance space between head and helmet crown to cushion and absorb intense impact. Genuine leather suspension band has long life and stands up under years of use.

For Use in Mines

A miner's lamp bracket, adaptable to every type of lamp, can be furnished either on helmet or cap. Being entirely a non-conductor of electricity, this is the safest miner's helmet available.

Winter Lining

For increased warmth, a two piece lining with a flannelette facing is provided. The lining is sanforized, warm, and is made in a full range of head sizes.

As the producers of millions of M1 Army helmet liners, the famous Cairns-Paramount Firemen's helmet, the Army, Navy and Civilian Air Corps crash helmet for jet pilots and other air corps personnel, the Army Quartermaster Tank Corps helmet, we are specialists in this field and offer you greater protection with lighter weight.

The Paramount helmet and cap are produced under one or more of these patents—No. 2-420-522, No. 2-423-076, and other patents are pending.



ORDER THRU YOUR DEALER OR, WRITE DIRECT TO

PARAMOUNT RUBBER COMPANY

Synthetic Rubber & Plastic Engineers & Mfrs.

10401 Northlawn Avenue

Detroit 4, Michigan

HOgarth 3050

PORCELAIN ENAMEL SIGNS

MADE OF 18 GAUGE METAL

A complete line of Signs for every industrial need. Stock wordings for warnings, safe practice reminders and general plant notices.

SPECIAL SIGNS TO ORDER

Write for Bulletin K-60A

Contact, the System's employee magazine, came out on October 1 with a front cover showing Pappy John Gronbeck McCoy and Pappy Clem Corey Hatfield in peaceful conference.

On October 1 and October 15, all 8,400 System men and women received at home invisible message post cards which, when dipped in water and made readable, proved to bear admonitions regarding keeping the truce, couched in mountain lingo. Mean-

while, everywhere one went in office, power station or gas plant, there were reminder tags, little brown cardboard jugs lettered in green with the slogan, "Make Safety Shine in '49." (If the mind visualizes shine as 'shine, that really is corn!)

Safety matches given out frequently during the month bore the same slogan and showed a hill-billy balancing a jug on his big toe. The October 15 poster depicted a scene at the dam site of

busy former "enemies" working effectively together in a common interest. On actual System jobs men were wearing brown cloth work caps with the slogan in green.

During October *Feudin' News* gave way to four "construction reports" showing progress on the Accident Creek dam—one log for each day in the period until 31 were in place. (Figure 5.) There were only three bad logs (disabling injuries) during the month as compared to an average of 10 during the first nine months of 1949.

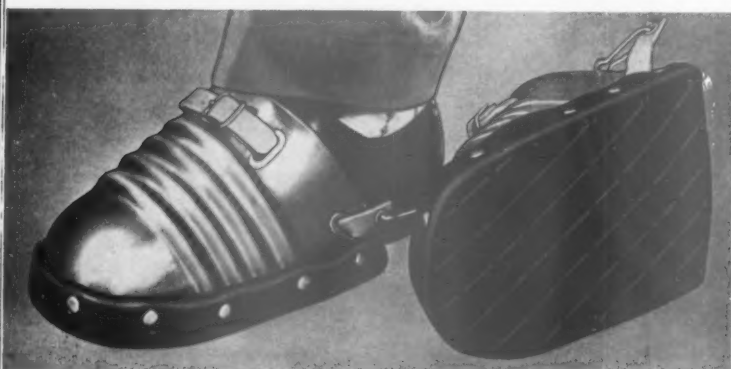
After the highly successful October truce, the clans went back to the former state of armed watchfulness, with the good effect of the truce carrying over into November and December and giving us the lowest yearly lost-time accident frequencies in System history. Electric operating was 5.11 for a 13 per cent improvement over 1948; gas operating hit a low of 10.10 for a 30 per cent gain. A 29 per cent improvement in the experience of our construction units to 19.94 gave us an all-time combined System-low frequency of 6.88. Severity was only .57, quite a bit lower than the average for our industry.

Incidentally, the score in the feud from April 1, 1949 to January 1, 1950 was McCoys—40 (Hatfield accidents) to Hatfields—47 (McCoy accidents). These add up to 87 for the nine months. During this same period of 1948 we had 117 disabling injuries.

Can we give credit to the Feud for the improvement? Well, never before had top management been kept so well informed about every sprained ankle. Never before had department heads been made so keenly aware of "the old man's" interest in that burn sustained by gas maker McCoy or garage mechanic Hatfield. If a corny theme with publicity and humor to match can prove successful in accident prevention, then we are all for it.

This year Clem Corey has come up with a brand new contest—the "Uptafortys" against the "Fortynovers." It may prove more corny than last year's feud! And Clem is still a young feller, with "a million of 'em."

Are You Fully Protecting the Feet of Your Employees?



"SANKEY" FOOT GUARD Equipped with ANTI-SKID FULL SOLE

"SANKEY" FOOT GUARDS consist essentially of a metal shield to be worn over the shoe whenever the foot is in danger of being either crushed or cut. The metal shield is designed to furnish a maximum amount of protection to the entire front of the foot—not merely the toes alone, but also to the instep—against hazards from falling, rolling or flying objects, or from accidental tool blows.

"SANKEY" Foot Guards are now available with a full anti-skid rubber sole. This prevents dirt, gravel and mud from working around and between the guard and shoe, and provides perfect coordination between the shoe and guard. The full sole is comfortable to use and protects the shoe sole from wear. They are of special value for use in ice houses, on icing platforms, for track and road maintenance and for pneumatic spade, drill and tamper operators. Write for literature or a trial pair.

ELLWOOD SAFETY APPLIANCE COMPANY
219 SIXTH STREET ELLWOOD CITY, PENNA.



Combination
Foot-Shin Guard



Improved
Foot Guard



Fibre Shin or
Shin-Knee Guard

Safe Housing Project No. 1

(From page 20)

hazards that exist on the job and the methods to be used for their correction. Housekeeping is an important phase of this job and it is stressed at safety meetings and on a day-to-day basis. Safety talks on this project are on a rather informal basis.

During demolition some unusual structural defects and weaknesses were discovered. One of the photographs shows a deep pipe recess that was cut in a brick wall to accommodate two pipes. In another instance, on the first floor at a location that had once been a cupboard, the remaining wall was only half the width of a brick thick. Such a wall is in danger of failure by buckling or bulging due to the load transmitted from above. Fortunately, this section of wall did not collapse.

Since there was much wood construction to be torn out preparatory to replacing the entire

interior, a fire hazard existed from the start of the work. Burning by gas torch had to be done to remove steel members. Fire extinguishers were strategically located all over the building and whenever any burning was done, the helper would stand by and pour water from a sprinkling can on any debris, rubbish or wood to make certain that sparks would not start a fire.

Openings cut in floors were protected with handrails that con-

sisted of a top rail, intermediate rail and toeboard to prevent the falls of workmen to lower levels and to prevent material from falling to the floors below. At an elevator shaft, where the elevator had been torn out in the demolition process, the opening was protected by a well constructed gate.

Signs reading "Danger—Watch Your Step" and "No Smoking" are placed around the building.

Two Bureau of Standards wall-testing gauges were installed at

Penetred
SAFETY
SOLES

16 ROWS OF
WIRE Claws
IMBEDDED IN RUBBER

**PROVIDE SURE FOOTING
ON ANY SURFACE**

\$2.00 POST PAID
INCLUDING CEMENT

**ACTUAL SIZE
OF RIBS**

FREE SAMPLE UPON REQUEST

You'll have SURE FOOTING the minute you put on the soles and your shoes will be dry because PENETRED Safety Soles are made of High Class Rubber that you securely cement to your work shoes, boots, and rubbers... they grip even better as they wear. Sold on a Money Back Guarantee.

State size when ordering.
Send check or money order.

FREE SAMPLE UPON REQUEST

PENETRED CORP.
B. LOCK C.
Marshfield, Wis.

Big Step Forward in SHOWER ROOM SAFETY



ATHLETE'S FOOT PREVENTION

Old way...

In the past, blame for Athlete's Foot was placed solely upon Athlete's Foot fungi.

SO...

Preventive methods consisted of attempts to kill the fungi or to prevent exposure to them.

BUT...

Skin specialists discovered that fungi are everywhere. You cannot kill them all, nor can you avoid exposure to them.

The real cause of Athlete's Foot, they found, is a weakened skin that allows the fungi to grow. Attempts to disinfect the feet may weaken the skin still further.*

New way...

Today, blame for Athlete's Foot is placed squarely upon a weakened skin.*

SO...

The new method is to toughen the skin and increase its resistance to fungus attack.

THAT IS WHAT ÒNOX DOES

Instead of disinfecting the feet, Onox mineral salts toughen the skin and make it resistant to fungus attack.

Onox is used in a sponge rubber foot mat. There is no splash, no mess, no waste. Nothing to get out of order. And the men like to use the mats.

Today, over 70% of the largest industrial companies in the country use ÒNOX

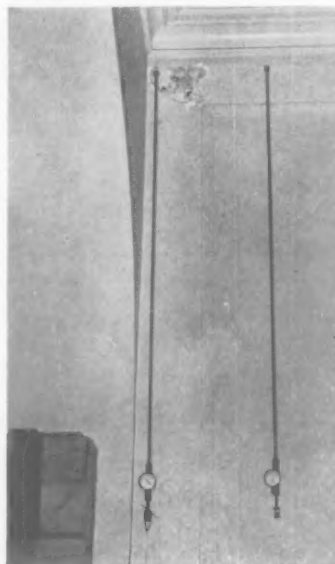
*Archives of Dermatology and Syphilology, April, 1942.

FOR FULL DETAILS AND OUR 60-DAY TRIAL OFFER, WRITE
ÒNOX, INC., DEPT. N., 121 SECOND ST., SAN FRANCISCO 5, CALIF.
WAREHOUSES: BROOKLYN, CLEVELAND, NEW ORLEANS, LOS ANGELES

the end of a stair hall on the second floor. These gauges were installed before the contractors moved in on the job to determine any possible settlement in the interior wall that was under observation. Settlement readings are continually being taken on the outside walls to determine any excessive settlement while the work is in progress. No unusual or unexpected settlement has been found in the walls.

The temporary shoring for the third floor and the roof had to be in place before the interior walls were demolished. Some of the wrecked material was removed by a well constructed rubbish chute while other material was taken down on the material hoist. After the pouring and placement of all but two or three sections of the underpinning, it was planned to excavate in the interior of the building for the new basement, which was to have a finished floor elevation of 36.5 feet (lowest interior footing and underpinning elevation is 28.0 feet).

Plans for the basement excavation called for the use of a small tractor with front loading bucket and the removal of the excavated



Bureau of Standards wall-testing gauges at end of stair hall on second floor.

material from this area to the outside through two of the underpinning section openings. The steel temporary and permanent shoring will remain in place and all of the remaining earth removed to the rough grade for the installation of the basement floor slab. There will also be installed a mezzanine floor at elevation 44.94 feet, while the finished ground floor will be at elevation 55.44 feet. The other floor elevations will be:—first floor at 68.11 feet, second floor at 89.11 feet, and the third floor at 105.96 feet.

The general appearance of the interior rooms that are steeped in tradition, such as the East Room, State Dining Room, Blue Room and others, will be reconstructed to look the same as before. Ornamental plasterers are at work copying the ornamental ceilings, moldings and other decorations.

For the firm of John McShain, John P. Hauck is manager and Walter L. Patton is superintendent. For the firm of Spencer, White and Prentiss, Robert E.

Sensational! New! SALT TABLETS

WILL NOT CAUSE NAUSEA OR STOMACH DISTRESS

PEP-UP Impregnated (controlled dissolving) SALT TABLETS are produced by an exclusive patented process which forms a complete coating around each crystal of salt. The controlled dissolving releases some salt immediately, which insures quick salt replacement, but not in sufficient quantities to cause nausea.

"PEP-UP" ENTERIC COATED SALT TABLETS — We also manufacture the original patented "PEP-UP" Enteric Coated Salt Tablets. Used for years by many of the largest firms in the country, these tablets have employee acceptance and are low in price.

THE PACKAGE IS THE DISPENSER — "PEP-UP" Tablets come to you in sanitary, factory-sealed Dispensers at no extra cost. **THROW AWAY DISPENSER WHEN EMPTY. HANG UP A NEW ONE.** Write for literature and prices.

MEETS GOVERNMENT SPECIFICATION 55-S-31C

UNITED STATES SAFETY SERVICE CO.
KANSAS CITY 6, MO. • BRANCHES IN PRINCIPAL INDUSTRIAL CITIES



White is construction manager, Ralph Cafone is chief engineer and Michael E. Kenny, is superintendent.

Safety Panel

(From page 66)

ticular party or unit. These, too, are conducted by a designated supervisor.

Each of the producing areas within the company hold a monthly foremen's meeting which includes all levels of supervision. A large part of this meeting is devoted to safety and accident prevention.

It is often difficult to measure exactly what aid used in the safety meetings proves most valuable. From observation of the enthusiasm and participation given, we would list the aids used in the following rank.

1. Demonstration and chalk talks, using conference method.
2. Slide films with discussion.
3. Motion pictures.
4. Guest speakers, etc.

MR. MILLER:



A safety meeting is one of the many methods used to produce and maintain safety consciousness. Furthermore, these meet-

ings remain the only common ground left on which employees and management can meet to deal with a common problem of great importance—the conservation of human life and limb.

The importance of safety meetings must be very definitely reflected to all employees and supervisors by management.

In our company, safety meetings are scheduled a year in advance; the date and time, of course, will vary according to departments and the pipe line companies.

During 1950 we have scheduled and approved by management 5,491 safety meetings in all departments and pipe line companies except the refining department. This department during a year's time will possibly hold from 1,000 to 1,500 gang and other safety

FOOTHOLD* SAFETY TREAD

The low-cost answer to . . .
SAFE FOOTING

Eliminate all those dangerous, slippery floor areas on ramps, aisles, stairways and all over the plant. You can do it economically with quickly installed, long-wearing abrasive cloth FOOTHOLD Safety Tread cleats or rolls. The "sandpaper-rough" surface provides the sure-footing that makes the job go faster as well as safer.

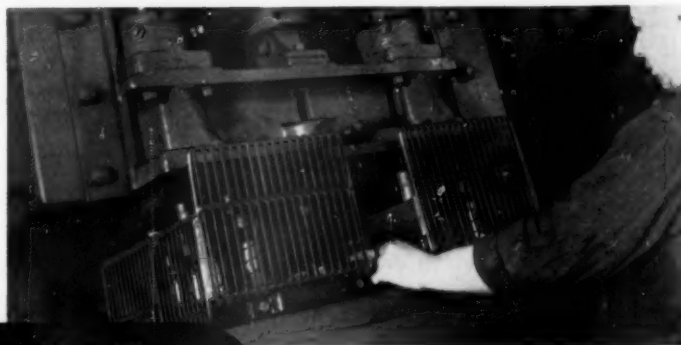
Survey all those slippery areas and make them safe now with FOOTHOLD Safety Tread. Write for information.

*Trade Mark



BEHR-MANNING • TROY, N.Y.

Use **NORTON** abrasives sharpening stones



H & K SAFETY GUARD PARTS

**Make Your Own
Sturdy Guards
at a Saving!
No Special Tools
Needed!**



Send for
H & K
Guard
Booklet

As simple as assembling a mechanical toy. We furnish perforated sheets and strips with round or slotted holes which can be mounted on frames fabricated from our perforated angles and bands. Any size or shape of guard for punch presses, shears, belts or machines can be constructed from our standardized parts by a shop handy man. Smooth ventilated surfaces—with full vision but complete protection.

Our parts bear Underwriters Label and guards properly constructed insure approval by safety inspectors.

**The
Harrington & King
PERFORATING CO.**

5645 FILLMORE STREET • CHICAGO 44, ILL.
NEW YORK: 114 LIBERTY STREET



No. 5621
FIRM-GRIP
No. 5613
SMOOTH
LENGTH:
14 inches
GAUGE:
.045-.055
COLOR:
Brown
SIZES:
10-11-12

*Request sample and quotations.

SEIBERLING LATEX
PRODUCTS COMPANY
AKRON 9, OHIO

Meet The Triplets

THREE NEW PRODUCTS FOR THE FIELD OF SAFETY

Already proving their worth in many varied industries.

PLASTIC INDUSTRIAL MARKERS:—A thin durable, plastic marker, easily applied to almost any floor or paving with a cold set cement. Ideal for marking aisles, storage zones, garage stalls and parking lots, docks and platforms, etc. Non-absorbent and resistant to dirt, oils and most solvents. Comes any width and length. Most popular markers are 3" x 6" spaced 6". Sheets are available for your use in cutting your own "pavement messages" such as "STOP", "DANGER", directional arrows, etc. Colors are yellow, white and red. State use and we will advise on markings.

Good "Shop-Housekeeping" Means A Better Safety Record.

"NO-SLIP":—An abrasive treatment for all slippery hazardous surfaces. First—apply the self curing plastic coating and then sprinkle on the abrasive grit and allow to cure. Fine for steps, ramps, docks, wash racks and wherever slipping hazards occur. On the soles of footwear it prevents slipping on the slickest ice.

"TRED-EZE":—A durable sponge rubber pad for cementing to hard floors where workers stand. Apply by wetting adhesive back with solvent and press into place. Comes in NEOPRENE where oils and destructive agents occur. Thicknesses are 1/8" and 3/16". Size 24" x 10' for cutting your own pads.

Write for full information on these products.

ARMOR-FLEX CO. 8 GARDEN LANE,
ST. LOUIS (Kirkwood) MO.

meetings, which gives us a total of approximately 7,000 meetings each year.

The next steps are:

1. To train chairmen and secretaries to conduct and record these meetings in the proper manner.

2. To furnish the chairmen in ample time before their meetings, pertinent material to help them conduct an interesting meeting. We call this our Safety Suggestion Bulletin for safety meeting chairmen.

3. In addition to the Safety Suggestion Bulletin, the safety meeting chairmen are furnished with another paper we call the "Safety Subject of the Month." In December of each year a list of twelve subjects is developed—one for each month during the following year. The chairman may use this material as he sees fit. In some cases it is assigned to a capable employee who will present it in his own words; at other times it is read either in whole or in part.

4. To make available motion pictures, sound slide films, safetygraphs, and various types of demonstrations. Wire recorded talks by our executives and others and also dramatized safety and first aid skits by wire recorder are used.

5. The Houston office and the safety engineers throughout the nation assist the safety meeting chairmen in obtaining outside speakers.

6. Our safety engineers attend and take part in discussions and sometimes appear on the program but never do they act as the chairman.

7. Management representatives and key supervisors attend safety meetings.

8. Refreshments and entertainment are furnished in many cases.

The chairmen and secretaries for the coming year for the producing department and the pipe line companies are trained. They attend a school for one day, 8-hour period, where our *Manual for Safety Meeting Chairmen* is really put into practice. Most of these men who are trained, do a job of conducting a meeting, introducing guests and speakers and keeping the meeting progressively on the move that would make any organization proud of their performance.

Chairmanship schools have proved to us that we can take truck drivers, gaugers, roustabouts, drillers, clerks and many others and in one day's time, train them to conduct a meeting properly. Our management feels that this type of training is most important to the success of the safety program.

Mr. HUTZLEY:



With the exception of regularly scheduled departmental safety committee meetings, most of our safety meetings are brief, informal huddle sessions to cover the problem at hand.

Naturally, those weighty affairs calling for considerable change or expenditure are brought before the central safety committee, complete with blueprints, graphs, charts or anything else needed to make the problem clear. Thorough discussion by this committee, composed of representatives from every production department, as well as plant management, engineering, medical and personnel, usually expedites understanding of the need and laying the foundation for the actual work required.

Mr. MUNK:



The safety meeting at our plant is a comparatively new activity. We have only been having our meetings since December 13, 1949, but have had phenomenal success since organizing.

The committee consists of a special group of 16 persons; 14 employees, representing the different departments, the safety director and the safety engineer. The finishing room, being the largest department, 106 employees, has two members on the committee.

The members of the committee act as the safety men of their departments and are at liberty to consult with the safety director or the safety engineer at any time.

Meetings are held every two months or oftener if desired and requested by a member and are for a period of one hour on the company time. The meetings take the form of a round table discussion. All accidents since the previous meeting are discussed as to the cause and preventive measures.

A report is given by the safety director relating to the progress of safety work since the last meeting.

Each member is requested to



YOUR INSURANCE *for Safety* at every height... on every job!

GOLD MEDAL JUNIOR Safety Swinging Scaffolds

COMPLETE SCAFFOLDING SERVICE

WHAT YOU NEED
WHERE YOU NEED IT
WHEN YOU NEED IT

• Rentals
• Sales

for Greater Safety...Efficiency...Economy

THE PATENT SCAFFOLDING CO., Inc.

Dept. N5, 38-21 12th Street • Long Island City 1, New York
See Your Classified Telephone Directory for Nearest Office





wear a
DUPOR No. 40
the Respirator that is
U.S.B. of M. Approved
for Type A Dusts

More than 40 sq. in. twin filter area.
Sanitary face cloth. Soft rubber face
mask. Controlled breathing . . . check
valves guard against re-breathing stale
air . . . exhalation valve exhausts breathed
air. Greater visibility . . . no blind spots!
Does not interfere with goggles or glasses.



Sample **\$250** pp
sent

H. S. Cover Fog-Proof, Gas-Tight Goggles for use with above respirator . . . \$1.65 pp.

H. S. COVER, South Bend, Ind.

NOW...Links of VINYL PLASTIC bring You a Better FLOOR MAT

- Greater Resistance to Gas,
Oil and Grease
- Longer Wearing Life
- Distinctive Beauty
With Utmost
SAFETY—

Here's the New Vinyl
Link Mat that meets
unlimited service
applications.

KEEPS ITS NEW LOOK...

These Vinyl links out-
wear ordinary rubber
links many times...
Color stays clear and
bright... They resist
soil absorption, keeping
their clean look longer.
They are firm and resilient,
giving continuous slip-proof
SAFETY. They resist oil,
gasoline and grease — won't
soften or damp rot. Assembly
of colored links permits optional
designs in red, brown, green, white
and black.



IN STANDARD COMBINATION OF
COLORS and SIZES — Or Made
To Your Specifications —

Standard pattern shown above: Black with red
link border and center in 17" x 25", 18" x 30",
24" x 36", 30" x 48" . . . Made also to your require-
ments in size and color design . . . Write today for full
story and prices.

MELFLEX PRODUCTS COMPANY, Inc.

L. E. WARFORD, President
410 S. Broadway, Akron 8, Ohio In Canada: P. O. Box 411, Fort William, Ont.



Sizes 3 feet to 16 feet
in height with standard
rubber safety shoes at
no extra cost.

For Safety's Sake Use

DAYTON SAFETY LADDERS

Maintenance men everywhere rely on
Dayton Safety Ladders for maximum
safety and convenience. Daytons are
constructed of tested airplane spruce
and reinforced with rigid steel sup-
ports to give great strength and light-
ness of weight.

Handrails of steel guard the large
roomy platform for added safety. Half
of platform can be raised to form an
extra step, when needed. These fa-
mous ladders can be set up instantly,
are easy to carry and fold compactly
for storing. Automatic locking feature
insures safety while ladder is in use.

Write today for Bulletin No. D-8

DAYTON SAFETY LADDER CO.

2339 GILBERT AVE.

CINCINNATI, OHIO

In Canada—Safety Supply Company—Toronto

report on all hazards and unsafe
practices in his department and
these are discussed as to the elim-
ination of such hazards and prac-
tices.

The safety engineer reports on
the general mill safety conditions.

Safety suggestions are requested
from all employees. These sug-
gestions are written, dated and
signed with the employees name
and clock number and handed in
any time before the meeting. At
the committee meeting these sug-
gestions are placed before the
members, identified only by a
number or letter and voted on as
to their value. A reward is given
for the first, second and third best
suggestions and others are ac-
knowledgeed by a letter of thanks
from the management.

MR. MYERS:



Our safety
meetings are
planned and con-
ducted according
to the special
purpose of each.
A particular
phase in accident

prevention is emphasized, ranging
from a small group indoctrination
lecture in safety to a depart-
ment-wide film-showing, teaching
a fire prevention story, home acci-
dent hazards, motor vehicle safe
driving practices or industrial acci-
dent hazards. Depending on the
subject matter, many small groups
are covered by Safetygraph lec-
tures.

The following example is typical:

A regular monthly safety meet-
ing in our production department
was called for 3:00 p.m. in a town
of the Gulf Coast area. Some in
the audience traveled a hundred
miles to attend. Meeting was pre-
sided over by the production
superintendent of the area. He
introduced a representative of the
safety division. A ten minute en-
tertaining film on outdoor sports
was presented. Then an instruc-
tional safety training film on start-
ing, operating and maintaining oil
field engines was shown. This film
had been obtained from the engine
manufacturer because, in previous
meetings, questions on safe start-
ing and operations had been
raised.

Following the films, the departmental accident experience for the preceding month was explained. Then questions from the floor were discussed.

MR. TYLER:



Safety meetings? — The safety superintendent or director should not hold them. Not to be misunderstood, I had better say that safety meetings should be held. Good ones should be held at reasonable intervals but not by the safety man if he can avoid it.

The topic for this PANEL gives me an opportunity to voice my pet theme song. The Safety Man should not carry the ball any more than he has to. The more people he has on his team carrying the ball for him the more successful his work will be.

A few days ago, a newly promoted foreman approached a safety superintendent requesting that he order for his shop some special gloves with turned cuffs for a certain kind of cleaning job. The safety superintendent said, "No, Jim, I can not order the gloves for your shop. That is part of your job. But I can show you what I think is the best kind for the job you have in mind—give you the maker's name, model number, and price—and then you order them just like you order the stripping compound."

The same policy can and is being applied to safety meetings in many organizations. The safety man in most companies, like the one mentioned above, could say, "No, Jim, I'd rather not hold the meeting for you. That's a part of your job. But I can supply you with some good material, some good slidefilms, safety-graphs, and even some short talks already written for you. We can vary it each week and I'll keep you supplied with ideas. But you hold the meetings and I know the boys will like it better when they see you do it."

Sure, such a scheme means more work, not less, for the safety office. But look at the dividends,



BROOKVILLE "Silver Fleece" HOT MILL GLOVES

A superior glove at lowest cost

BROOKVILLE "Silver Fleece" gloves are the lowest priced hot mill gloves you can buy, but afford exceptional resistance to heat and abrasion. Available in band top and long palm gauntlet styles. Made slightly oversize to reduce strain on seams. Write for catalog and price list.

**A Complete Line of Work Gloves for Industry
Stocked in FOUR WAREHOUSES
for Fast Deliveries**



Ample stock of Brookville Gloves are carried in our warehouses located at:

**Patterson, New Jersey
Brookville, Pennsylvania
Chicago, Illinois
Los Angeles, California**

BROOKVILLE GLOVE CO.

6 HENRY STREET

BROOKVILLE, PA.



**THERE'S SAFETY
IN THESE NUMBERS**



"CHAMPION"

EYEGARDS

with 10 way ventilation

-NEXT BEST THING TO YOUR EYES-

Eyegard "Champions" provide the finest in eye protection, yet cost no more than ordinary goggles. "Champions" provide greater comfort because the lightweight plastic frame is molded to form-fit the face . . . greater protection because the goggles are impact-resisting . . . greater ventilation through three large vents at side of cup and seven additional vents around the lenses. Always cool and fog-free. Why pay a premium . . . get Eyegard "Champions" with all these "wanted" features on your next order.

Write for free catalog of Eyegard Equipment . . . it will save you money!

AMERICAN INDUSTRIAL SAFETY EQUIPMENT COMPANY
3501 LAKESIDE AVENUE CLEVELAND 14, OHIO
DIVISION OF THE BURDETT OXYGEN COMPANY • CLEVELAND, OHIO

field tests show

18 TIMES THE WEAR

SURETY'S NEW SURESEAL PK GLOVES

(with GRIPTITE FINISH)



In tough, on-the-job tests, Sureseal PK Gloves with Griptite Finish wore 18 times as long, handled 18 times as many parts, as good hot mill gloves with 1/4-inch thick wrappings of friction tape. And that kind of wear means LOW glove costs.

Sureseal PK Coating is super-resistant to chemicals . . . won't crack or peel. Surety's exclusive Griptite Finish grips effectively, wet or dry, oily or not—won't scratch metal, lasts as long as

the gloves. Band top or knit wrist types available, with or without ventilated back.

Write for sample (on your business letterhead, please, specifying job involved).

DEPT. S

THE
SURETY
CARBOLITE, DMD
RUBBER CO.

"More people reached by an ever expanding safety sales force."

Safety meetings, like fire extinguishers, come in all kinds and in all sizes, each for a different purpose. However, if properly handled, each can be aided and spark-plugged, but not run, by the safety man.

In many of these cases the safety office may have to show the foreman how to put the message across. In most cases the safety office will have to develop the message; assemble the material; obtain the aids such as films, charts, models, equipment, etc.; and perhaps, even help schedule the meetings. And in the final count, it is my firm conviction, all this effort will be worth getting another salesman on-the-line.

Living with the Heat

(From page 35)

peratures. Air conditioned cabs have been designed, with great improvement in comfort and safety for the operator.

Radiant heat is a serious problem in some operations, including furnaces, kilns, foundries, rolling mills, cupolas, glass and brick-making, etc.

Dark objects as a rule are better absorbers and radiators of heat. By polishing the surface, its reflecting power is increased and its absorbing power diminished. Radiant heat is similar to light. It can be absorbed, reflected, and transmitted in a straight line. Gases permit passage of radiant heat with little rise in temperature, while such materials as iron, wood and paper absorb most of the heat radiated to them and thus serve to shield objects.

Radiant heat may be controlled by one or more of several measures. Isolation of the entire process is sometimes practicable or the main source of heat may be insulated or water jacketed. Fire chains in front of open furnaces and stationary or movable screens also protect workers from intense radiant heat.

Protective clothing also plays an important part in protection against radiant heat, particularly face shields and masks with filter lenses.

PIPE MARKERS



anyone
can use—
everyone
can read

QUIK-LABEL Pipe Markers conform to American Standards Association Pipe Identification System. QUIK-LABELS come on handy cards . . . stick without moistening. Names of materials printed in large black letters on correct ASA background colors. CAN BE READ UP TO 75 FEET. Markers for over 140 materials, **including all materials listed in ASA Standard A13**, available on Brady Stock Cards. Specials made to your order. QUIK-LABEL Pipe Markers are Silicone Plastic coated to resist dirt, grease, fumes, moisture . . . indoors or out. Replace slow and costly painting and hand stenciling. Exclusive Starter-Strip automatically releases part of label for fast peeling. QUIK-LABELS mark your pipes so that anyone who can read will know what's in them. **QUIK-LABELS leave no room for doubt . . . or tragedy.** Write for useful literature and FREE SAMPLES today.

**FREE
SAMPLES**

W. H. BRADY COMPANY Established 1914

Manufacturers of Self-Sticking Tape Products

CHIPPewa FALLS 2, WIS.

• Distributors in 125 Cities

In combatting the ill effects of high temperatures, an adequate intake of drinking water and salt is essential. Salt dispensers adjacent to the drinking fountain are found in most plants. In addition to the plain sodium chloride tablets, other types are available. Since the pure salt causes distress to some stomachs, tablets are made with salt and dextrose combined or with a coating that passes through the stomach unchanged and dissolves in the intestines. Another type disintegrates slowly.

Sell the Boss

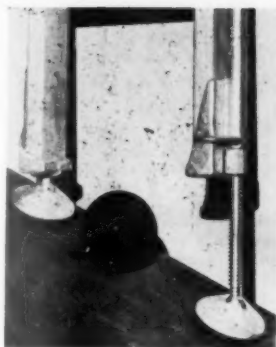
(From page 32)

the failure to heed the physician's expert counsel can be found in the fundamentals of sales psychology. Your friends undoubtedly appreciated the value of good health, but for them physical well being did not have the ability to hold their interest and command their actions.

Virtue may be its own reward, but it has little appeal. The fact that accident prevention has common sense values does not guarantee that it will excite the imagination and control the attention of even the boss. It has to be sold vigorously and well.

The doctor-patient relationship is different from that of the safety director-boss association. The doctor can do no more than advise. The responsibility for seeing to it that the patient continues to follow advice has never, to my knowledge, been assigned to the medical man. It rests solely with the patient.

However, the safety engineer, out of pride of accomplishment and because of his position, is practically compelled to convince the boss to put the accident prevention recommendations into use. He is judged as a capable or poor safety specialist according to the plant's accident experience. The boss almost never will excuse the safety director by rationalizing that he did not follow the safety recommendations to the letter. It is perfectly correct for the boss to feel that it is up to his subordinates to present their problems



adjustable to 9"

Lightweight Aluminum Alloy Ball & Socket Foot

The adjustable Jon-Ne-Fut is the answer to all your ladder leveling troubles. Will adjust to 9".

The Jon-Ne-Fut non-adjustable safety foot, for use in warehouses, docks, and production plants where adjustments are not required.

Approved by Underwriters Laboratories

Write for Information

**JON-NE-FUT
Manufacturing Co., Inc.**

Plant—4982 East Firestone Blvd., South Gate, Calif.

DISTRIBUTORS IN PRINCIPAL CITIES



non-adjustable

at last. A REAL SAFETY
LADDER FOOT, AND IT'S FULLY
ADJUSTABLE, TOO!



Completely Mechanical—
Positive Adjustment

No Maintenance—
No Breakdowns

Use

SAFETY

"HEVI-BEVL"

LETTERS and FIGURES

For
SAFETY
in marking
all kinds of
Metal

The most economical all purpose grade of Safety Letters and Figures. Will give outstanding service on almost any marking job. All sizes—1/32" to 1" characters from stock. Mecco Safety Steel for No Spalling and No Mushrooming.

Write for Bulletin LF-50.

- No Spall
- No Mushroom
- More Service
- Thumb Side Marks for easy identification

CUNNINGHAM CO.

SAFETY STEEL STAMPS

200 East Carson Street • Pittsburgh 19, Pa.

LITTELL Pres-Vac
SAFETY FEEDERS

30 Pres-Vacs cost less than the average cost of only one punch press accident.

1 **BOOST PRODUCTION 20% to 100%**
—Reported by Users.

2 **ELIMINATE DIE BREAKAGE**
—Assures Feeding Blanks One at a Time.

3 **INCREASE OPERATORS' SAFETY**
—Punch Press Accidents Greatly Reduced.

4 **CUT INSURANCE COSTS**
—Fewer Accidents Mean Lower Premiums.

Littell Pres-Vac Safety Feeders are made in single and multiple types in a variety of cup sizes and styles.

F.J. Littell MACHINE CO.
4165 RAVENSWOOD AVENUE, CHICAGO 13, ILL.

Operated by Compressed Air

Don't Monkey with Hand Feeding
SAVE FINGERS
SAVE DOLLARS

Write for Catalog

and recommendations so that he can immediately grasp their import. It must be remembered that the boss is not an expert in safety. His decisions will be influenced only by the quality and clarity of the accident preventionist's recommendations and the ability of the recommendations to draw the boss's attention from the many other pressing matters before him for his action.

The safety specialist, important as he is, must jockey for position and favor in competition with the other staff personnel who also believe that their functions have a principal, if not the primary, importance in success of the plant. Success in attracting the boss to the smaller aspects of the safety program will bring about his whole hearted acceptance of the entire program.

It is best to present your ideas to the boss in writing. Advertising—a type of selling—has used the written word as a selling medium with real success. Over the years advertising copy writers have found that their copy is most effective, not only when used with an appropriate "attention getter," but also when "headlines" are employed to introduce the ideas.

An examination of magazine advertising copy will show that, in general, a headline which incorporates the attention drawing principle is placed at the top of the copy. Frequently sub-headings also top each key paragraph. There are many successful types of headlines which can be applied to a memorandum or letter to the boss. For instance you can begin your headline with the words, "How to . . ." Here are two examples:

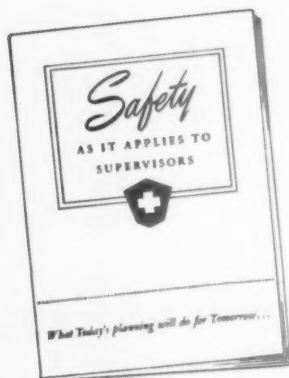
1. How to Increase Production in the Small Parts Department.
2. How to Reduce Lost-Time in the Radio Department.

Closely related to the above headlines are those which begin with the word, "How." Examples:

1. How the Ajax Chemical Company Reduced an Accident Exposure Similar to Ours.
3. How Time Consuming Accidents Can Be Eliminated in Department 23.

Other successful headlines begin with the word "New." Examples:

PLANT SAFETY



Our helpful booklet "Safety as it Applies to Supervisors" is being used today by many progressive companies in their safety education programs. It is planned and produced by Marsh & McLennan's nation-wide staff of engineers. Write for your free copy today.

MARSH & McLENNAN INCORPORATED

INSURANCE BROKERS • CONSULTING ACTUARIES

Chicago New York San Francisco Minneapolis Detroit Boston Los Angeles Pittsburgh
Seattle St. Louis St. Paul Duluth Indianapolis Portland Superior Cleveland
Buffalo Columbus Phoenix Vancouver Toronto Montreal Havana London

1. New Safety and Production Improvements for Plant 2.
2. New Approach to Production Efficiency.

You will observe that each of these headlines, in addition to using key introductory words which have proved successful, lead the reader into thinking about one of the three "attention getters" that we have categorized as of fundamental interest to all people. In every case, we have selected the topic of money or its related subject, economy, for that has infallible appeal to production executives.

It is sometimes advisable to use a headline which mentions money specifically.

For example:

1. A \$100 Safety Guard Will Save \$500 a Month in Lost-Time Accidents.
2. This Plant Loses \$12,000 a year in Lost-Time Due to Accidents.

You may also begin your headline with the word "This".

For example:

1. This Safety Guard Has Greater Efficiency Than All Others.

Like A Protective Glove!



Hand protection is essential for workers who

come in contact with oils. PREVENTO acts like a protective glove for sensitive skin. DOLGE recommends PREVENTO 200 for those who work with straight, non-soluble oils, or with solvents and paints; PREVENTO 300 where coolant emulsion touches the skin. 300 is also an effective cleaner.

Write for literature.

PREVENTO
The C. B. DOLGE Co.
WESTPORT, CONNECTICUT

2. This Magical Lamp Automatically Lights Highway Turns Before You Make Them.

However, attracting attention does not reduce sales resistance entirely. It has an inestimable value, for in any contest, he who strikes the first blow has a decided tactical advantage. Yet, there must be a quick and efficient follow-up to effect a satisfactory closing. Many a sale is lost when all the facts are either not available or not presented clearly. Therefore, when selling the boss, the safety specialist, immediately after he has decided on his means for attracting attention, must make certain the selling points for his ideas or program will be based on all the details that will emphasize the need and reasons for the boss' becoming a buyer.

The most effective way to present the selling points is to put them in writing. No salesman, unless he has a separate income, would take the chance of presenting his product without written material that nails down his selling points and which can be read and reviewed by the prospect.

Writing out the proposal accomplishes two things. First, you will have to think the whole idea through thoroughly, gathering the necessary data to support the recommendation and do some analyzing of the cost factors concerned. The boss in order to make sound decisions must have a questioning attitude. He will ask you about all the details that are related to the costs and economies involved. You must have the answers or lose his confidence and eventually his acceptance.

Remember nothing succeeds like success. Approach the boss successfully with your ideas the first few times, and you will find his sales resistance at a minimum later.

The second advantage of putting your ideas in "black and white" in this. Many times a sound suggestion dies at birth because it is mentioned to the boss at a time when his mind is crowded with many problems. If it had been written it would oc-

1950... OUR 40TH ANNIVERSARY

Asbestos Gloves for HOT Jobs



Industrial
200-14L

There's a *Big* difference between Asbestos Gloves and you can tell the difference when you get Industrial's 200-14L asbestos gloves. *The quality stands out* in your hands and on your hands. Seamless one piece construction from tip to top. No seams at the wrist or working edges to pull out or burn out just when protection is needed most on a hot job. The 200-14L has a knitted cotton lining (not woven) anchored in each finger and in thumb. *The quality stands out* in the correct design and proportions of the big roomy pattern that allow a cool, comfortable fit. They are double sewn. Standard 11, 14 and 23 inch lengths. Other lengths and many special types of asbestos gloves and mittens are available both lined and unlined. The quality of all these items stands out because they are all made of sturdy, close woven 2½ pound per square yard Underwriters grade Asbestos cloth . . . from the best mills in the United States.

Be safe—use Industrial's Safety Apparel backed by 40 years of experience and know-how that means dependable low cost protection for rough, tough service.

We are designers and manufacturers of a complete line of Industrial Safety Apparel. Write for catalog and tell us your requirements.

Industrial
GLOVES COMPANY
A CORPORATION

Main Factory: 1726 Garfield St., DANVILLE, ILL.
(In Canada: SAFETY SUPPLY CO., Toronto)

have you
**CHECKED
YOUR
TOWEL
COSTS
LATELY**



**Sani-Dri
SAVES
TOWEL AND
MAINTENANCE
COSTS**

**GIVES YOU CLEANER,
MORE SANITARY WASHROOMS**

Compare present day towel costs with modern Sani-Dri electric hand dryers. You'll discover amazing savings over towels . . . and the time and trouble of servicing empty towel cabinets and waste containers is eliminated completely! New, faster-drying Sani-Dri provides automatic 24-hour hand or face drying service with a stream of hot air . . . the most sanitary method known! New heating element and faster-flow nozzle dries hands or face faster than ever before!

SAVES 85% OF WASHROOM COSTS

Sani-Dri quickly pays for itself out of savings! No buying or stocking of towels. No unsanitary litter to clean up . . . no paper-clogged pipes . . . no fire hazard . . . no servicing of towel cabinets. Sani-Dri has carried the Underwriter's Seal of Approval for 18 years. It is the only electric dryer that has proven its dependability in over 22 years' use!

**Distributors in Principal Cities
THE CHICAGO HARDWARE FOUNDRY CO.**
"Dependable Since 1897"
1060 Commonwealth Avenue
NORTH CHICAGO, ILLINOIS



The Chicago Hardware Foundry Co.
1060 Commonwealth Avenue
North Chicago, Illinois

GENTLEMEN: Please send literature on the following:

☐ Brochure 1082 on new, faster-drying Sani-Dri Electric Hand and Face Dryer

NAME _____

ADDRESS _____

CITY _____

STATE _____

copy a place before the boss until he was free to consider it.

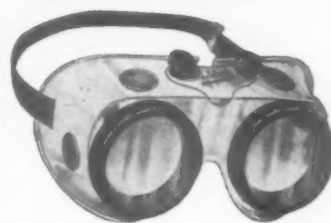
One of the frequent mistakes made when writing proposals is to present them in a skeleton form. This may be done in the mistaken belief that short, terse copy has the best selling value. The fact is that experimental tests have shown that the longer copy is more effective. All the details should be thoroughly and carefully presented. To do this requires some lengthy writing.

Some men prefer to talk their ideas over with the boss, rather than put them in writing, because they have an inherent distrust of the accuracy of the written word. They wonder whether what they say will have the desired effect on the boss. For if it does not they fear the whole project may be set back so far it would never have another opportunity to be considered. These men believe that a personal discussion permits them to gauge the delicate changes in the boss's reaction and to subtly vary their approach accordingly. Yet, whatever the value of discussion, it is not as successful a producer of results as the "put it in writing" sales approach for ideas.

It is certainly advantageous, however, to follow up the written suggestions and discuss them with the boss. In fact, it is recommended that at the time the memo is presented an appointment should be made, if such formality is necessary, to talk it over with the boss. Selling, it must be remembered, is nothing more than a specialized type of educating. Every teacher knows that combining seeing with hearing makes for more effective learning. Here is a suggested outline for constructing a memorandum to the boss:

1. Get the boss's interest.
2. Get him to think. The interest producing item you have chosen should lead him to think about what you want to sell him.
3. Get him to feel. The boss's thoughts must become so intensely concerned with the subject that he feels strongly about the matter.
4. Get him to act. Suggest the action you want taken. At this point his feelings should be so strong about the subject that he is compelled to action.

it's new!



**It's a coverall
CLEAR PLASTIC
industrial goggle**

The No. 612 Sellstrom Coverall Industrial Goggles were introduced less than two years ago. Since that time they have been tested by hundreds of users, who have voiced their approval by a steady stream of orders.

These goggles are designed to accommodate reading glasses of almost any type.

They are of one piece frame construction—can easily be handled by one hand—both eye cups move as a single unit.

The two center clamps permit adjusting to fit any face. The rolled edges assure utmost face comfort.

They are perfectly balanced, weigh only 2½ ounces, the weight is evenly distributed.

Made of tough plastic, and will render long service even under severe punishment.

The clear plastic offers wide vision, permitting the worker to observe others where men work close together.

Will accommodate any type 50 m/m lenses.

In the same style and size we offer two companion goggles: our No. 610 Coverall Welding Goggles and our No. 611 Coverall Grinding Goggles.

Write for our No. 610 folder, which fully describes and illustrates these three popular Coverall Goggles.

sellstrom
**MANUFACTURING
COMPANY**

Offering more than
500 Eye and Face Safeguards

622 N. Aberdeen Street, Chicago 22, Ill.



Safetygraph on Falls

Just off the press, Safetygraph No. 16, "Falls," deals with the type of accident which is second only to the motor vehicle among causes of all accidental deaths.

Commenting first that the results of a fall, whether from a high place or a low place, cannot be predicted, the Safetygraph then points out the common causes of falls, Stairways, ladders, and scaffolds in unsafe condition or unsafely used, unprotected elevator entrances, use of makeshift supports, climbing on piles of materials are among the subjects discussed.

Slippery floors, horseplay, and poor housekeeping are other major causes with which this new Safetygraph is concerned. In each case preventive measures are indicated, and, throughout, the question and answer method is used to enlist audience participation.

Safetygraph No. 16, like the others in this series of visual training aids, is 18 by 24 inches with cartoons and drawings, printed in color, on one side of each sheet for the audience to study and printed remarks on the other side for the leader to use.

Member prices (safetygraph with easel): 1 to 9 copies, \$13.25 each; 10 to 99, \$12.50 each; 100 or more, \$12.00 each; safetygraph only (without easel): 1 to 9 copies, \$10.00 each; 10 to 99, \$9.50 each; 100 or more, \$9.00 each.

New Instruction Cards

Safety instruction cards provide concise and handy lists of safe practices for specific operations. They can be used in a number of ways—as the basis of discussion at safety meetings, as reminders to employees on the job, as sources of reference for foremen and supervisors, as stuffers for pay envelopes.

A complete industrial set will be especially useful to the supervisor who has to prepare job analyses and job instructions, plan safety meetings, make safety speeches,

write articles for plant papers and bulletins.

Seventeen new cards and one revision have recently been printed. Five of the new cards and the revised card apply throughout industry:

- No. 74—Oilers—General Precautions (revision)
- No. 770—Oilers—Fire Prevention Rules
- No. 771—Skids—Removing from Freight Cars
- No. 772—Hand Tools—Inspection Check List
- No. 773—Portable Electric Tools—Inspection Check List
- No. 774—Hand Tools—Check List for Safe Use

Two cards were prepared for the mining industry: No. 647, Loading Machine Operators, and No. 648, Cutting Machine Operators.

Of the ten cards concerned with causes of accidents in hospitals, several have wider application. H 123 on glass tubing, for instance, would be useful in training labora-

tory workers in schools or in industry. These new hospital cards are:

- No. H 119—Electric Pads
- No. H 120—Ampoule Cuts
- No. H 121—Sterilizers
- No. H 122—Broken Glass
- No. H 123—Hot Water Bottles (poster-type of card)
- No. H 124—Falls from Bed
- No. H 125—Cut Adhesive and Bandages
- No. H 126—Hot Water Bottles (list of rules)
- No. H 127—Medications
- No. H 128—Glass Tubing

Member prices: 1 to 9 copies, 5 cents each; 10 to 99, 2 3/10 cents each; 100 to 999, 1 7/10 cents each; 1000 or more, 1 1/2 cents each; industrial sets: 1 to 9, \$7.50 each; 10 to 99, \$7.00 each; 100 to 999, \$6.50 each; 1000 or more, \$6.00 each. Samples of cards on request.

"Flash Points"

FLASH POINTS, new magazine of the Petroleum Section, makes its bow with the July-August issue and will be published every other month thereafter. Built along the same lines as the SAFE WORKER and the SAFE DRIVER, the two most popular safety publications in the country, FLASH POINTS carries the sort of safety information men like to read.

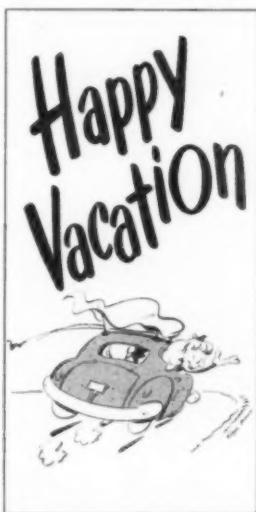
The new magazine features easy, conversational style, petroleum industry vernacular, cartoon illustrations, and spots of humor. Designed to appeal to petroleum men from roughneck to transporter, FLASH POINTS will add to the effectiveness of the petroleum company's safety program.

Member prices: annual subscriptions paid in advance, 1 to 9, 40 cents each; 10 to 99, 35 cents each; 100 to 999, 26 cents each; 1000 to 4999, 23 cents each; 5000 to 9999, 22 cents each; 10,000 to 19,999, 21 cents each; 20,000 or more, 20 cents each. For prices of annual subscriptions billed bi-monthly and of single issues, write Council headquarters. Three-line imprint on the front cover, \$3.50 per issue, regardless of quantity.

Pulp Mill Data Sheets

Two new illustrated data sheets to acquaint pulp mill safety engineers and supervisors who are not pressure vessel specialists with some of the requirements and recommended practices considered important for the safe operation of pulp mill pressure equipment are now available.

D-P.P. 10, "Pulp Mill Digest"—To page 106



The eight-page leaflet "Happy Vacation" can be distributed to employees as a tactful reminder of safe practices for swimming, using small boats, hunting, exposure to summer sun and heat, vacation driving. To encourage employees to take the leaflet home, a chart for travel expenses appears on the last page. Printed in red and brown on yellow stock, the leaflet carries lively cartoons and copy which is concise and easy to read.

from
NATIONAL SAFETY COUNCIL

All posters displayed on these pages, except the jumbo poster, will be available through 1950, and may be secured as a part of N.S.C. membership service, or by purchase.

Posters numbered 8800 and up are new posters. Others are among the 774 posters shown in the 1950 Poster Directory.

Write to Membership Dept. of
N.S.C. for further information.



Electrotypes or poster miniatures on this page are not available, nor can payroll inserts be supplied.

Posters below are printed in two or more colors
(Available only in sizes indicated)



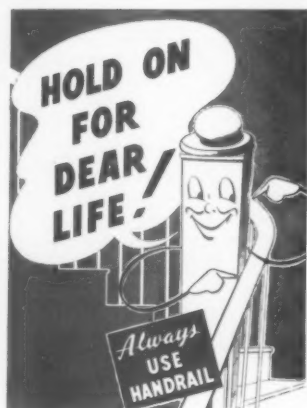
NATIONAL SAFETY COUNCIL

9031-C 25x38



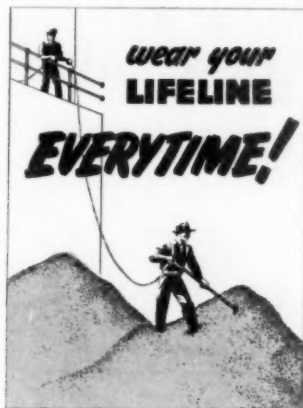
JUMBO POSTER for JULY 1950

Jumbo posters 9' 11" by 11' 8" in size, designed for outdoor use, are issued monthly. They are available to members for \$42.50 annual subscription.



NATIONAL SAFETY COUNCIL

8882-A 8½x11½



NATIONAL SAFETY COUNCIL

9003-A 8½x11½



NATIONAL SAFETY COUNCIL

8918-B 17x23



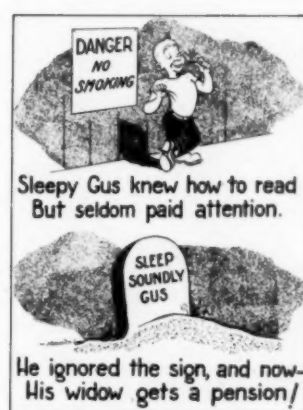
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9020-A 8½x11½



NATIONAL SAFETY COUNCIL

9022-A 8½x11½



NATIONAL SAFETY COUNCIL

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See box on page 98 for information about these and other National Safety Council posters.

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NATIONAL SAFETY COUNCIL
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NATIONAL SAFETY COUNCIL
8744-A 8½x11½



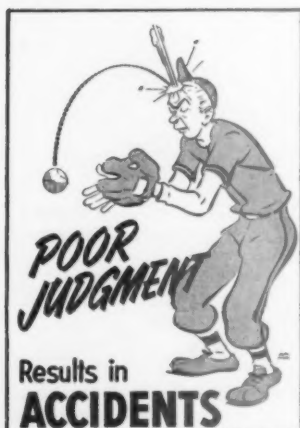
NATIONAL SAFETY COUNCIL
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NATIONAL SAFETY COUNCIL
8852-B 17x23



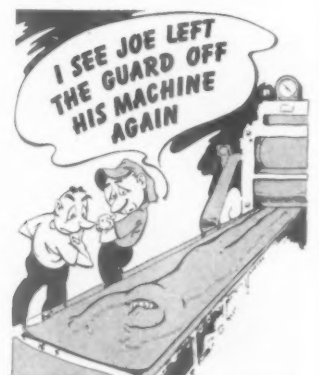
NATIONAL SAFETY COUNCIL
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NATIONAL SAFETY COUNCIL
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NATIONAL SAFETY COUNCIL
8936-A 8½x11½

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(Available only in sizes indicated)



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8409-B

17x23



NATIONAL SAFETY COUNCIL

8613-A

8½x11½



NATIONAL SAFETY COUNCIL

8558-A

8½x11½



NATIONAL SAFETY COUNCIL

8996-A

8½x11½



NATIONAL SAFETY COUNCIL

V-9037-A

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NATIONAL SAFETY COUNCIL

V-9009-A

8½x11½



NATIONAL SAFETY COUNCIL

T-8973-B

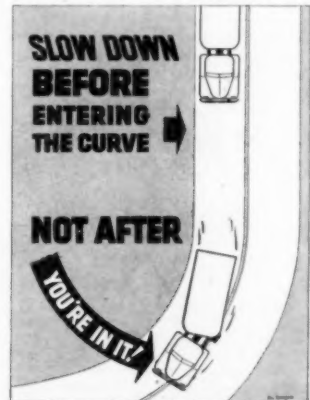
17x23



NATIONAL SAFETY COUNCIL

V-9010-B

17x23

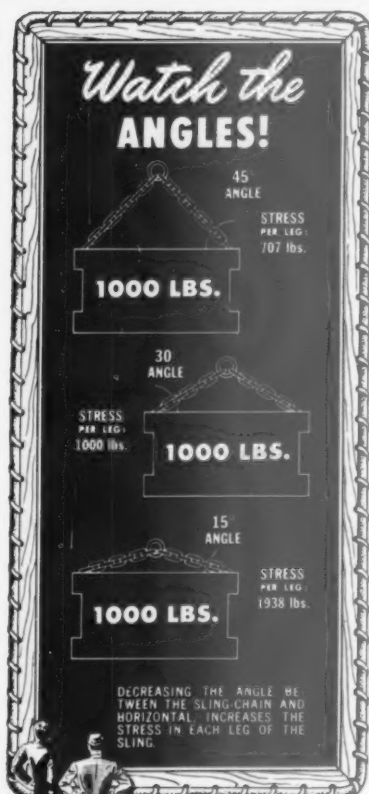


NATIONAL SAFETY COUNCIL

V-9008-A

8½x11½

See box on page 98 for information about these and other National Safety Council posters.



**If you use
CHAIN
Specify **McKAY**
Engineered CHAIN**

When using a sling-chain, the closer sling-legs are to vertical, the greater the load that can be lifted safely. Factors such as this make it important to engineer chain for each specific application.

That's the benefit of specifying McKay Chain for use in your plant, for this "engineered" line gives you the exact type, size and grade for every working need. Too, McKay's diversified line insures you the widest selection of iron, steel and alloy chains and fittings to do any job for which chains are used.

**Send for the
McKAY
SLING-CHAIN KIT**

It gives sling-chain specifications and shows how to specify chains. Included is a chart for recording working data on chains used in your shop.



THE McKAY COMPANY

445 McKAY BUILDING

PITTSBURGH 22, PA.

Safer Hospitals

(From page 40)

ferences in conditions from those in buildings for other purposes. It states that "Manually operated fire alarm systems shall be provided . . . which sound an audible alarm in departmental offices, the engineering office, fire brigade headquarters, nurses' quarters, and other locations" where they will not disturb patients. Distinctive visual alarms must be installed at each nurse's station and be used only for fire alarms. Although more fire drills are emphasized for irregular intervals, it is not intended that infirm and bed-ridden patients be moved.

Hospitals should be patrolled thoroughly at least every hour of the day, the new code states, and sufficient personnel should be charged with responsibility for taking effective action in case of fire.

In existing buildings that do not meet code requirements for fire resistance or fire propagation, new provisions have been added. Wood frame buildings with floor areas up to 7500 square feet may be occupied in the two lower stories (but not in basements) when provided with automatic sprinkler protection, protection of vertical openings, and enclosed stairways.

Buildings of masonry wall and wood joists or heavy timber construction may be occupied in the three lower stories (but not in basements) when all vertical openings are protected, stairways are properly enclosed, and automatic sprinklers are provided.

Four stories may be occupied if walls, ceilings and partitions have a minimum fire rating of one hour.* Buildings of fire resistive construction may be occupied in the eight lower stories when all vertical openings are protected and stairways are enclosed. Occupancy is limited to four stories if defined hazardous areas are not protected by an automatic sprinkler system.

Automatic fire detection systems or automatic sprinkler sys-

tems are now recommended for such hazardous areas as boiler rooms, rooms for storing combustible materials, carpenter shops, paint shops, and others, along with adequate supervision to assure satisfactory operation whenever they may be required.

Inspections Are Opportunities

(From page 25)

his report. These are helpful only as preliminary guides. Let us think twice before adopting any of them as they are.

More effective than a ready-made check list is a custom-built inspection guide for each plant and business establishment. Here's how to put it together:

First, set up three basic headings for the three major divisions of hazards as follows:

- Structures, machinery, equipment, material and other physical facilities.
- Methods.
- Plans for new construction, installation of machinery and equip-



A STOCK BADGE FOR EVERY PURPOSE

**Our 1933 Series
is made in over 35
Safety-Minded Titles
One or 100—
immediate delivery**

1933 Series — 1 1/4" diameter, hard glazed enamel, heavily gold plated pin and safety lock catch, \$9.00 doz. (plus Fed. tax).

Write for Complete Safety Catalog
Clarence Williams

Williams Jewelry & Mfg. Co.
Silversmiths Bldg., 10 S. Wabash Ave.
Phone CE ntral 6-5018 Chicago 3, Ill.

* An ASTM standard test: E119-49.

WHEN THE HEAT GETS YOU HAV-ALIFT



It's common fact that excessive sweating, slows down the body's normal processes. To alleviate this condition and restore production to normal, place a HAV-ALIFT Dispenser near the water cooler.

HAV-ALIFT Regulated Salt Tablets will prevent nausea and digestive disorder which might occur by taking plain salt tablets.

HAV-ALIFT comes in 750 and 1,500 Dispensers with either plain Salt or Salt and Dextrose tablets.

For further information, write

A. E. HALPERIN CO., INC.

75 NORTHAMPTON STREET
BOSTON 18, MASS.

REDUCE SLIPPING HAZARDS!



INDUSTRIAL FOOTWEAR

Patented ANTI-SLIP Sole with Squegee slits that holds a safe grip on slippery surfaces.



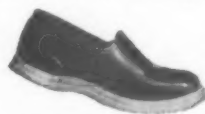
KLINKTITE BOOT

Very flexible, over-the-sock boot with cushioned insole and long-wearing anti-slip TOP-SIDER sole. Black, men's full sizes, 7-12. Short, 8.95 Storm King, 12.95



WORK RUBBERS

Lightweight safety on the job. White anti-slip TOP-SIDER sole. Black, men's full sizes 7-12. 4.95



Special prices in case lots. At your dealer or write us.

Sperry Top-Sider

20 Main Street, Beacon Falls, Conn.

ment, specifications for seasonal or occasional jobs and purchase orders for material and equipment.

Next, area by area, operation by operation, make as complete and detailed a list as possible of items that should be covered. Use plenty of collaboration. This is a big job and you will come out with a long list.

The next step is to combine items which are repeated. This will produce a partial check list applicable to all parts and operation.

Next, assemble and select other items which are of importance in certain locations or at certain times.

Next, incorporate items to cover official accident prevention, health and fire protection standards as specified by federal, state and municipal codes and regulations that apply. Next, include clues to specific hazards as indicated by recent accident analysis.

Finally, make constant revisions to keep abreast of current conditions.

This custom-built inspection guide should be arranged so that it may be assigned in units, depending on the qualifications of the various inspectors, on the type of inspection each inspector must make, and on the time element involved.

I approve a so-called "check list" when this term is used to describe a "list of reminders." However, I do not believe in a check list form on which an inspector records his findings as he goes along by entering check marks in yes or no columns.

The best inspection reports I have seen have been narrative.

In the interests of a thorough job and complete coverage, we should inspect at some one time during the year every nook and corner of the premises and every piece of equipment and every process and operation.

The complete inspection problem of any establishment may be represented by a circle—parts or segments of which should be handled by persons with special qualifications. It is only by a combination or compilation of the



FASTER—SAFER—ELIMINATES SPLICING

Millions in daily use prove *Safe-Line* the right way to hold wire rope securely. It's the better way, too!

Better because *Safe-Lines* are faster than splicing and serving, or using U-bolts.

Better because *Safe-Lines* outpull the strongest rope, hold a tight thimble, minimize rope or sling breakage.

Better because *Safe-Lines* are easy to use and re-adjust, without special tools or skilled labor.

Better, too, because *Safe-Lines* enclose sharp wire ends, preventing personal injury and mental hazards.

Try this better way that saves you time and money.

Approved BY UNDERWRITERS' LABORATORIES AND CIVIL AERONAUTICS ADMINISTRATION



FORGED AND MASTER COINED TO FIT ROPE SIZES $\frac{1}{16}$ " TO $\frac{3}{4}$ "

Safe-Line double spiral splines fit each wire and strand, providing a powerful grip, without cutting action to the rope. Replacement guarantee on clamp against breakage and fracture.

WRITE FOR DESCRIPTIVE PRICE-LIST FOLDER

NATIONAL SAFE-LINE CLAMP CO.

11252 NINE MILE ROAD
VAN DYKE, MICHIGAN

"IT'S A SNAP" with BUHRKE'S new **SCOTCH SNAP**



A revolutionary multiple purpose snap for hoisting material to the pole top. Makes possible an endless hand line, eliminating the tying of knots. Designed so it can not catch on service wires while raising or lowering. Tested to 2500 lbs. between eyes and 1000 lbs. on each hook and upper eye. Write for details!

R. H. Buhrke Co.
4701 W. Grand Ave.
Chicago 39, Ill.

work that we are able to produce complete inspection coverage.

5. *HOW* should inspections be made?

So far, we have considered the person who is to make the inspection, when he is going to make his next inspection, why he is going to make it, and what he is going to inspect for. But he is not ready to go yet. How should he proceed?

I am going to mention a few of the more important personal methods or attitudes of mind that, in my opinion, will assist any inspector in doing a more effective job:

Our inspector should have the physical ability to cover the area to which he is assigned. This may involve walking, climbing, etc.

Route should be orderly. We should follow the process when possible. Perhaps every other time we should follow it in reverse. Often when an inspection begins with the yard gate and ends with the spur track at the shipping platform, those departments near the end of the route get a light touch because the inspector is tired.

In larger plants we may lay out the trip room by room, floor by floor and building by building.

Imagination is a priceless ingredient in an inspector. He should not only be able to see the hazards but also to visualize hazards which occur only at certain times and under certain circumstances.

The inspector should have an inquiring mind. He should be curious regarding everything he observes. Actual existing conditions, where accident causes are found, are probably best revealed by asking questions. The most challenging and productive question which the inspector should continuously ask himself and others is "why?"

An inspector need not acquire the reputation of being a pessimist or a habitual fault-finder. People should not dislike having him appear in their departments. To combat this, the inspector should always try to demonstrate his sincerity and desire to be helpful to both foremen and employees. He should be optimistic and enthusiastic. He should believe that there is no hazard that cannot be

ILLUMINATED

**VENTILATED
NON-FOGGING**

**DUST, WEATHER AND
WATERPROOFED**

**STRONG, DURABLE
ALL-METAL
CONSTRUCTION**

**SINGLE AND
DOUBLE UNITS**
Write for further
information and prices

**DIAMOND
BULLETIN BOARDS**
SAFETY FIRST SUPPLY CO.
425 MAGEE STREET
PITTSBURGH 19, PENNA.

eliminated, or at least reduced.

The inspector should realize that he is in a position to learn a lot and broaden his experience. He should be a good listener and have respect for comments and suggestions.

Inspectors should make progress notes when hazards have been corrected. These are of interest to everyone reading them and add brief notes of encouragement to a type of report which has come to be considered usually loaded with trouble.

The inspector should understand that his work is primarily fact-finding. He may suggest corrective measures whenever his knowledge and experience qualify him to do so but he should never hesitate to report any condition which he cannot solve personally.

Contacts with foremen should be made during an inspection. Such contacts are not only courtesy but they pay off in good will, information and cooperation.

Many inspectors have accident prevention hobbies. These are

problems in which they are particularly interested or concerning which they have some special knowledge. Inspectors should keep in balance and not overemphasize any type of hazard or location.

The inspector should set an example by using all personal protective devices where other employees are expected to use them.

One of the most important things for an inspector to learn is not only to observe but to make sure that the things he sees are recorded in his mind. Let us teach our inspectors not only to *look* at things but to *see* them. This means making sure that they register and are recognized.

Company's Accident Rates at New Low

Pittsburgh Plate Glass Company's plants, laboratories, and branches were safer places to work in 1949 than in any year since company-wide records have been available.

Showing a reduction of 23.5 per cent under the previous year, the frequency rate of accidents was the lowest since 1932. Severity rate was down 53.8 per cent, the lowest ever recorded by the company. These encouraging items are contained in the Annual Report of the Safety Department recently issued by T. R. Donoghue, director of safety.

Seven of the company's plants completed 1949 without a disabling injury, and an additional 16 plants improved their safety standings during the year.

Following are the units which had no disabling accidents and which earned the Pittsburgh Plate Glass 1949 Certificate of Honor:

Glass Research Laboratory, Creighton, seventh consecutive no-accident year;

Gas wells and lines, Ford City, fourth consecutive no-accident year;

Springdale paint plant, second no-accident year;

Portland paint plant, second no-accident year;

Shop Two, Ford City, second no-accident year;

Los Angeles paint plant, first no-accident year;

Suydam Paint Division, first no-accident year.

The 16 locations whose records were better than the company's 1949 accident rate and were



**"YOU'RE
SAFE",
says MATTY**

"If you use DURABLE mats"

You're safe, because Durable mats keep your floors safe, your employees safer. Floors are protected from wear and dirt — employees work on fatigue relieving rubber — accidents are cut to a minimum.

Your investment's safe, for Durable mats last year after year — thousands have seen hard service for more than ten years.

You're safe, too, from scattered dirt — Durable mats trap dirt under the mat, keep hallways and work floors clean.

There's a SAFE Durable mat for every purpose. Let MATTY tell you — mail the coupon.

DURABLE

MAT COMPANY

75 N. Pleasant St. Norwalk, Ohio
2926 16th Ave., S. W.
Seattle 4, Wash.



Dear MATTY:

Please send us Durable information on Safe Mats for

Avoid SHOCK injury!

THE ETRACO SAF-T-LITE SAVES LIVES



Recommended by Safety Engineers

"There has never been an accident, due to electric current, since we adopted your Saf-T-Lite," so writes the Safety Engineer for one of the largest Utilities in the East. Yes, safety men everywhere are insisting that the Etraco Saf-T-Lite be adopted as standard equipment.

Write on your business letterhead for free folder giving complete information as to various sizes, prices, etc.

ETRACO MANUFACTURING CO., INC.
56 Woods Church Road, Flemington, N. J.

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TO GET THE PROTECTIVE APPAREL DESIGNED
TO FIT THE MAN AS WELL AS THE NEED

WHEN

YOU WANT IT—

WHEELER

PROTECTIVE APPAREL

Write or' phone:

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SAFETY ENG. & SUPPLY CO.
BUFFALO
THE ELWOOD COMPANY
CAMBRIDGE, MASS.
CUTTER, WOOD & SANDERSON CO.
CHARLESTON, W. VA.
SAFETY FIRST SUPPLY CO.
CHICAGO
PROTECTIVE EQUIPMENT INC.
CINCINNATI
THE E. A. KINSEY CO.
CLEVELAND
SAFETY FIRST SUPPLY COMPANY
COLUMBUS, O.
THE E. A. KINSEY CO.
DALLAS
ENGINEERING SUPPLY CO.
DAYTON, O.
THE E. A. KINSEY CO.
HOUSTON
ALLIED SAFETY EQUIPMENT CO.
INDIANAPOLIS
THE E. A. KINSEY CO.
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SAFETY INCORPORATED
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E. D. BULLARD COMPANY
MILWAUKEE
PROTECTIVE EQUIPMENT INC.
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E. D. BULLARD COMPANY
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SYRACUSE SUPPLY COMPANY
TOLEDO
SAFETY FIRST SUPPLY COMPANY
WHEELING
SAFETY FIRST SUPPLY COMPANY

**WHEELER PROTECTIVE
APPAREL, Inc.**

225 W.
Huron St.



Chicago 10,
Illinois

awarded the company's Certificate of Merit were Works One and Works Three at Creighton, Works Four and Works Six at Ford City, Works Nine at Crystal City, Natrum Chemical, Barberton Chemical, Barberton Limestone Mine, Corpus Christi Chemical (Southern Alkali), Zanesville Cement, Ditzler Color, Forbes Finishes, Houston Paint, Red Wing Linseed, Newark Paint and Baltimore Brush.

There was only one fatal accident in 1949 in the 38 plants and laboratories included in the company's safety report. Last September an electrician splicing a cable was electrocuted when a fellow workman closed an electric switch which was not locked out. In view of the millions of man-hours worked in 1949, the year was one of outstanding achievement in safety performance.

Tools for Your Program

(From page 97)

ers," discusses equipment, inspection and repair, rotary digesters, blowpipes (sulfite), blowpipes (sulfate and soda processes), blow valves, and blow pits or tanks.

D.P.P. 11, "Unfired Pressure Vessels and Piping in Pulp Mills," covers drum dryers, hot acid accumulators, heat exchangers for indirect cooking, evaporators (alkali process), bleach boilers, rag or straw boilers, wood tanks for acid storage, stock bleaching tanks or towers, safety valves and vacuum breakers. Pipe materials, layout, telltale holes, pipe support, hot lines, repairs, and identification of contents are considered under piping.

Member prices: 1 to 9 copies, 15 cents each; 10 to 99, 11 cents each; 100 to 999, 7 cents each; 1000 or more, 6 cents each.

"Vacation Driving"

The July Operation Safety leaflet, *Vacation Driving*, is written in the form of a memo to the driver and is especially suited for distribution as a payroll envelope stuffer, on safety racks, or as a handout at safety meetings. For information about the complete Operation Safety kit for July, write the Traffic and Transportation Division of the Council.

Amazing
new
floor
coating

STOPS FALLS!



CONTAINS
NO WAX...

OUTWEARS WAX

2 to 1

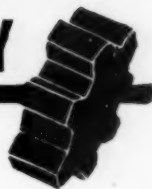
At last—a resilient, long-wearing coating of good gloss and maximum slip resistance. NO-SLIP, a new but thoroughly tested floor coating, provides a safe, lustrous surface. It is easy to apply, can be maintained inexpensively. (Co-efficient of friction rating 0.90 on linoleum and asphalt tile... by Underwriters' Laboratories Re-examination Service.)

Write for free demonstration kit and literature.

TIME-SAVING SPECIALTIES

706 New York Life Building, Dept. 6
MINNEAPOLIS, MINNESOTA

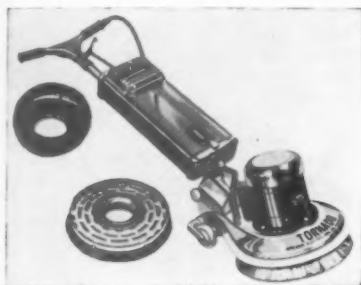
NEW SAFETY EQUIPMENT FOR INDUSTRY



Manufacturers are invited to send in announcements of new products, or improved special features. Only items which can be considered as "news" to our readers will be published.

Floor Machine

Features of the new Tornado All-Purpose floor machine announced by Breuer Electric Manufacturing Co., 5100 Ravenswood Ave., Chicago 40, include: Rotary safety-grip switch, finger-tip solution control, fully adjustable handle, self-raising wheels, automatic brush coupler, "foam-feed" brush design, and quick-change snap-on brush rings. An important feature is the new replaceable brush rings. Brushes are made up of individual, concentric bristle rings which may be replaced easily. Only one metal brush back is required. The bristle rings are secured to the brush back by strong spring steel clamps and replacements or changes can be made quickly wherever the machine is at work.



The method of attaching the brush to the floor machine has been simplified and made completely automatic. It is only necessary to place the brush on the floor, move the machine over it and lower into place. When the switch is turned on the brush locks automatically. A slight push with the foot when the machine is stopped releases the brush. Additional cleansing properties are secured by the new foam-feed brush design which insures an even distribution of solution over the entire working area the instant the solution regulator is turned on. The handle is adjustable and may be secured in the most convenient position for the operator whether he is tall or short. It contains the rotary-action, safety-grip switch which permits a comfortable grip and may be placed in a vertical position for more compact storage or completely removed for transport. The self-raising wheels draw up automatically with a lift of the handle.

Flash-O-Graph

Safety messages which gain and hold attention by a combination of light and motion are made possible by the new M. S. A. Flash-O-Graph, a product of Mine Safety Appliances Co., Pittsburgh, Pa.

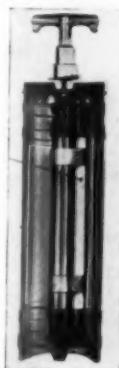
Messages are spelled out in bright dots of light which move continuously like electric news bulletins. The unit is cased



in steel with a black crackle finish. It measures 23" x 3" x 6" and weighs 6½ lbs. complete. The flashing action is provided by a replaceable, endless, perforated tape which is illuminated by a fluorescent lamp. The tape passes continuously behind a glass window through which the message is projected. Fifty-two standard tape messages are available and special messages can be furnished on request.

Fire Extinguisher

The Buffalo Fire Appliance Corp., 221 Crane St., Dayton, Ohio, has just announced that Dryex, the new absorption agent, is now a part of each Buffalo VL Extinguisher. The cut-away sketch indicates the manner in which the molded fabric-covered Dryex is fastened to the inner mechanism of the extinguisher. Dryex absorbs naturally-accumulated moisture from the liquid and prevents corrosion due to liquid deterioration. The capacity of each installation of Dryex is 1.32 to 1.5 cc. of moisture.



The extinguisher has several other special features, including the new Graphitar piston which is unaffected by heat, cold or chemical reaction of the liquid, thereby preventing sticking and corrosion. Other features include the rotating suction pump pickups; recessed nozzle; forged brass top and embossed shell to prevent damage from dropping; flat bottom so extinguisher will stand alone when charging; improved

leak-proof breather assembly; one-piece shock-resistant pickup valve. The corporation also announces a new fire alarm which sounds a penetrating, five minute warning when temperature reaches 135 degrees. It is a completely automatic,

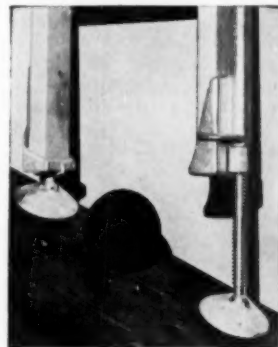
self-contained wind-up unit, requiring no electricity, no complicated installation, and no maintenance. The alarm gives instant warning at the outbreak of a fire. The



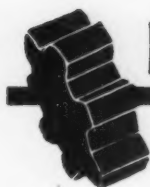
alarm is automatic and independent of any outside power source. Its rust-proof wind-up mechanism stays energized until excessive temperature releases the heat-sensitive fuse, or until the fuse is unscrewed slightly to check the alarm. If the alarm has sounded due to a fire, a new fuse is easily replaced. Then the mechanism is rewound, and the alarm is ready to sound the instant a fire threatens.

Ladder Foot

Jon-Ne-Fut Manufacturing Co., 4982 E. Firestone Blvd., South Gate, Calif., are marketing a new ladder foot available in both non-adjustable and adjustable models. The adjustable foot answers ladder leveling problems and will adjust to 9". Ball and



socket joint allows the safety foot to fit the contour of surface, giving approximately 10 square inches of vacuum footing per ladder foot. The non-adjustable foot is recommended for use in warehouses, docks and plants where adjustments are not required. This product has been tested and listed by Underwriters' Laboratories.



NEW SAFETY EQUIPMENT FOR INDUSTRY

Further information on these new products and equipment may be obtained by writing direct to the manufacturer. It will help in identifying the product to mention this announcement.

Head Cutter for Steel Drums

A head cutter that cuts the head of any size drum, clean, in approximately one minute is introduced by Michael A. Schinker Manufacturing Co., 6514 S. Western Ave., Chicago 36.

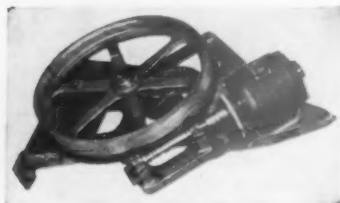
It is manually operated and will work equally well on empty or filled drums, from 10 to 55 gallon sizes and 20 to 16 gauge stock. It sets on top of the drum. Turning



of the crank causes it to complete the circle of the drum. The head will drop into the drum while the cutter remains resting on the open drum. The cut leaves no ragged edges and the metal is flanged slightly inward. Portable—weight 36 lbs. It is constructed to withstand hard use. Strong, sturdy, yet light in weight. The cutter blade will cut about 1000 heads before resharpening is needed. The head cutter also doubles for sealing leaky chimneys. Cutter wheel is replaced with a roller wheel.

Electric Door Operator

An improved direct gear drive electric door operator called the Y-M Chief equipped with automatic safety switch and designed for overhead and single sliding or double parting doors is announced by Yoder-Morris, Inc., 1065 E. 61st St., Cleveland, Ohio. This door operator is being used in factories, warehouses, fire stations,



public garages, and similar locations where frequent, dependable door operation is required. Doors and equipment are protected against accidental damage by an automatic

safety switch built into the operating unit. The switch breaks motor contacts when the closing doors touch any obstruction. The safety control automatically resets itself.

The operator is furnished with ball-bearing-type electric motors of capacities to handle normal door requirements up to 200 square feet. It is supplied complete with all electrical control apparatus including relay and three-button switch ready for standard connections to power supply. The three button switch provides direct control for starting, reversing and stopping. Up to as many stations as desired may be provided for convenient door operation at any practical distance.

In overhead installations a dust-proof enclosed steel guide track provides smooth operation for the door trolley. The overhead installation, due to its design, may be made with a minimum headroom clearance of only 5 inches.

For both single sliding and double parting doors, the operator is located on the wall directly above the entrance. It is easily fastened in position by two bolts attached to the wall and one overhead support bolt fitting. A cable arrangement extending from the operator through pulleys at both sides of the opening to fittings on the door provides a simple, direct cable drive.

Fork Truck

A 10,000-pound capacity fork-lift truck, gasoline powered and equipped with the Dynatork drive, has been added to its line by the Industrial Truck Division, Clark Equipment Co., Battle Creek, Mich. The new model is known as the Utilitrac No. 100.



The Dynatork drive will be standard equipment on the new truck and the only type of drive available. It transmits engine power through a magnetic field, across an air gap, eliminating need for any type of friction clutch. The conventional transmission is also eliminated, and replaced by constant-mesh forward-and-reverse gearing. Advantages resulting from this drive, according to the manufacturer, are increased work-capacity for the machine, higher efficiency, reduced maintenance, and

minimum driver fatigue.

Other features are the pivoted steering-axle assembly, which increases stability by maintaining all four wheels in constant contact with the road surface; and a 6-cylinder engine, developing 50 brake horsepower at 1800 rpm.

Specifications of the machine include over-all length, 107 inches; wheelbase 66 inches; over-all width, 50½ inches; outside turning radius only 104 inches; and inside turning radius, 12 inches. The machine turns readily in intersecting aisles of 88-inch width. Easy steering, maximum driver comfort and visibility, maneuverability and ease of operation are other advantages claimed for the new machine. A control lever is mounted on the steering column, and response is instantaneous. An "inching" pedal is located in the position normally occupied by the conventional clutch pedal. A single gear-shift lever controls low and high speeds. In the main, the driving operation is similar to driving an automobile.

Safety Shoe

To encourage wider acceptance of steel toe safety shoes, Safety First Shoe Co., Holliston, Mass., has been combining street-style lasts with price appeal. Latest



street and shop style to be offered is a moccasin type shoe in new burgundy color. It features the flanged steel cap for toe protection. New safety posters are available in limited quantities from the manufacturer.

First Aid Dressings

Three new adhesive and elastic first aid dressings of the Band-Aid type have been announced by Davis Emergency Equipment Co., 45 Halleck St., Newark, N. J. The new dressings are in three different shapes and sizes which provide an appropriate dressing for every first aid need. "Spot dressings" are circular with a diameter of ¾"; "Patch dressings" are 1½" x 1½" square; and there are rectangular "Elastic adhesive bandages," 1" x 3".

All are elastic, waterproof, sterile, and flesh colored. Individually wrapped, each dressing has a vent hole for aeration. A

NEW SAFETY EQUIPMENT FOR INDUSTRY



Manufacturers are invited to send in announcements of new products, or improved special features. Only items which can be considered as "news" to our readers will be published.

Bulletin Board

The new Dav-Son three panel bulletin board, announced by A. C. Davenport & Son, Inc., 311 N. Desplaines St., Chicago 6, provides an attractive posting area both for management notices and employee activity messages. The board consists of three cork backed panels in a hardwood frame, with each panel separately enclosed by a locking glass door. The cork surfaces provide an area for pinning up letters, photos, safety posters, etc.



A special feature of the combination board is a removable changeable letter panel which slips into any of the three positions. This panel consists of a grooved wood background, covered with black wool felt, and trimmed with metal edges. Professional looking messages can be set up on this panel with the white plastic letters and figures provided with the board.

Working Platform

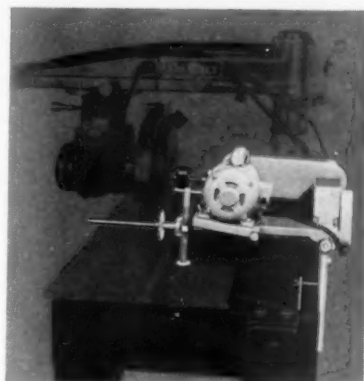
Atlas Industrial Corp., 849 39th St., Brooklyn 32, N. Y., announces a new working platform known as marquee servicer for overhead maintenance, painting, lighting, cleaning, etc. It is only 6 feet 8 inches in height and raises to 11 feet 6 inches. To raise or lower to any position, merely crank the handle. No erection required. The base is 28 inches by 4 feet and the stock platform is 2 feet by 4 feet. Special sizes can be made to order. The raising mechanism is by hand operated winch with self locking worm gear held by two steel cables. It is easily rolled and raised. Outrigger brace prevents tilting or rolling. It is of sturdy welded steel construction.

Bags for Packaging

Industrial Safety Supply Co., 5514 McCorkle Ave., Charleston 4, W. Va., has developed cellophane bags for packaging sterilized safety equipment such as goggles, respirators and gas masks.

Bag No. 101 is made to accommodate either spectacle with or without side-shields and cup type goggles. No. 202 for all types of respirators. No. 303 for gas masks and is made so that high-voltage gloves after testing can be packaged. These bags are inked in green "Sterilized for your protection."

After sterilization these items are sealed in the bags by special iron made for this purpose.



The mobility of the unit further enables the operator to move it completely out of the way in a matter of seconds once power feed work has been completed. Hand operations may then be resumed without delay. The unit is equipped with adjustable feed rollers for feeding material into the cutter and taking cut material away. Material is fed by these rollers and held firmly against the guide strip to assure accuracy in cutting operations.

The belt drive of the unit may be quickly adjusted to feed material into the cutter at rates of speed ranging from extreme low to a high of 120 feet per minute. These rates of feed have been determined by actual tests to be the most suitable for the needs of the average machine operator.

Foundry Hook

American Chain Division, American Chain & Cable Co., Inc., York, Pa., announces a new hook made especially for trunions and other foundry uses. The new hooks are stress engineered, and forged into a round at the point for easy insertion in holes in castings. The new hooks are furnished only as an integral part of the complete ACCO Endweldur registered sling chains.

Hooks are of the same material as the sling chain. The entire sling assembly is proof tested from bearing point to bearing point. The sling chains and foundry hooks come completely assembled.



special occlusive feature assures complete and effective seal around all edges of the gauze pad. This is especially valuable for men wearing gloves. Among the uses for which the dressings are designed are face lacerations, head and scalp wounds, puncture wounds, finger and hand wounds. The spot and patch dressings are available in units of 8 each, and the elastic adhesive bandages in units of 16.

Calculator

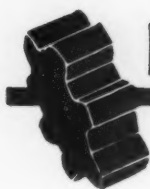
F. J. Littell Machine Co., 4165 Ravenswood Ave., Chicago 13, announce the Littell coil weight calculator which provides an easy way to figure coil weight. This handy gadget gives the exact weight of a coil of steel. It permits checking the weight indicated on bill of lading. It overcomes figuring or guesswork, and overloading of reel or securing the wrong reel for a given size or weight of coil.



It is simple to operate. Set together the inside and outside coil diameters upon the calculator, by revolving the disc. This gives the pounds per inch width of coil. Then set together this weight and the width of stock to get the total weight of the coil. The calculator offers these advantages: It permits picking out the correct size reel needed for a specific group of coils. It assures efficiency of reel operation by providing the right size reel. Calculators may be obtained by writing the company direct.

Power Feed Attachment

DeWalt, Inc., Lancaster, Pa., has introduced a new idea in a power rip feed attachment for a radial arm saw. This equipment can be attached to almost any radial arm saw and many under-table saws. The power rip feed may be attached quickly and securely with two mounting brackets supplied with the unit. The design of this unit enables the operator of the saw to use it not only for straight rip sawing but also for bevel ripping, molding, power feed shaping, ploughing, grooving and rabbeting.



NEW SAFETY EQUIPMENT FOR INDUSTRY

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Fire Extinguisher

Pyrene Mfg. Co., 560 Belmont Ave., Newark 8, N. J., has developed a new, cartridge-operated water type fire extinguisher with stainless steel shell. Eliminated is the annual recharging necessary with the soda-acid extinguisher. The carbon dioxide pressure cartridge need be replaced and the water replenished only if the extinguisher is discharged. When the extinguisher is turned upside down and struck on the floor, the gas, contained in the cartridge fitted into the extinguisher cap, is released inside gradually. As a result a steady 40-foot stream is easily directed from a safe distance.

Having carbon dioxide as an expellant eliminates the job of mixing soda into the water and the hazard of handling acid. Modern in appearance, the satin finish of the stainless steel remains attractive and is easily dusted.



The extinguisher is 5 pounds lighter, easier to carry and operate, yet it is stronger and is tested to 500 pounds rather than the customary 350 pounds for riveted units. Another feature is a plastic, transparent nozzle. It is tough; resists mistreatment which might change the shape or size of the opening.

Pyrene has discontinued the manufacture of riveted type copper extinguishers, but is continuing to produce seamless drawn copper alloy extinguishers. Stainless steel welded extinguishers, in addition to the

cartridge-operated water type described above, will also be available in soda-acid and foam types.

Stamping Fixture

A special stamping fixture for marking metal name plates in mass production operations has been developed by the M. E. Cunningham Co., 200 E. Carson St., Pittsburgh 19, Pa. Designated as Model PSF-10, the fixture is for use in a small power press, screw press or kick press.



This device is composed of a chase block which contains the steel marking letters and a striking block which is held in the throat of the press by set screws. The striking block is made from high grade, heat-treated tool steel with the shank machined to required specifications. Slots for containing the letters are machined out of the solid tool steel chase block to suit the set-up of the name plate layout. When the same style plate is used for several different models, logotypes are supplied. To assure alignment and even depth stamping, the logotypes are engraved to precision standards. They are easily changed by means of a small magnet or tweezers. The chase block is equipped with alignment pins so the plate can be set quickly into position over the type. It is mounted on the press bed by means of a holder section which can be clamped or bolted in position.

Safety Shoes

Hy-Test Division, International Shoe Co., St. Louis, Mo., recently announced the addition of a number of new safety shoes to their line. Among these are the new Burgundy moccasin with neoprene crepe full



double sole and heel which is oil resistant and accords excellent wear. The H714

illustrated is suitable for dress, sport or work wear. Contains anchor flange box toe and nap vamp lining which permits air-conditioning of the foot and retards perspiration rot.



Style H717, also illustrated, is a safety shoe combination—oxford, straight tip lined quarter shoe and plain toe shoe. Each has neoprene cork sole and heel with non-ferrous exposed metal. It's oil resistant and non-sparking. Contains anchor flange and nap.

Welders' Goggle

A headrest goggle for gas welders, cutters, burners, brazers and furnace men with new, simple means for making it easily adjustable to any head size is announced by American Optical Co., Southbridge, Mass.



The company has adapted the "free-floating" headgear long used on welding helmets for use on the goggle. A slight twist of a knob adjusts the goggle to the wearer's head size. The mechanism is enclosed in a fiber tube for insulation and to prevent hair pulling.

The "free-floating" headgear provides balance with no overhanging weight and the goggle may be instantly changed to the "off-guard" position by a flick of the wrist. Designed to be worn over eyes or personal glasses, the goggles have well ventilated, indirect side shields to keep out sparks, metal splashes and stray light rays. The

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headrest goggle may be obtained with either Noviweld or Noviweld-Didymium lenses in several shades; replaceable cover lenses are provided to protect these more costly filter lenses.

Hoisting Clamp

Merrill Brothers, 56-02 Arnold Ave., Maspeth P. O., New York City, now have in production their latest addition, the Adjusta-Clamp. The clamp will lift any metal object up to 12 inches thick that its adjustable jaws can grip. Larger openings can be supplied on special order. The



new clamp has all the features of the company's drop-forged lifting clamp, plus a movable gripping jaw that can be rapidly set by hand to accommodate the part to be lifted. Another feature is the ability to lift from the horizontal to a vertical position without changing the grip. It may be used in the toolroom, production, shipping department, etc., for moving all types of heavy metal loads.

Tool Products

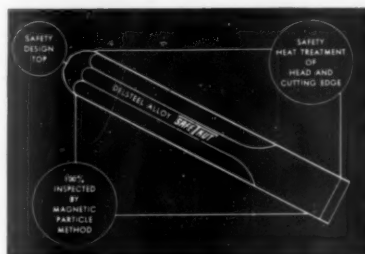
The Delaware Tool Steel Corp., Wilmington, Del., is now marketing its line of Safe-T-Kut tool products which consist of hand chisels, pneumatic and electric hammer chisels, center punches, paving breaker steels, back-out punches, blacksmith's tools, etc.



These tools are made from Delsteel alloy, a patented analysis used by the manufacturer in its standard steel products. The Safe-T-Kut line differs from the regular line in its special features that stress safety. These features are:

Magnetic particle inspection of each tool. This type of inspection will reveal any defects such as laps, seams, forging, grinding, or heat treating cracks not discernable to the eye.

Special design of striking end of hand tools. This shape removes much of the metal coming in contact with the striking hammer which results in a diminished tendency of the tool to spall or mushroom.



Special heat treatment of striking end of hand tools. Such a heat treatment produces a striking surface that is sufficiently hard to resist "mushrooming," but not hard enough to cause spalling.

Salt Dispenser

The Standard Safety Equipment Co., 232 W. Ontario St., Chicago 10, announces an addition to its line of salt dispensers, the Fairway Crystal. This new, clear plastic dispenser is expendable; when the salt supply is exhausted, the unit is discarded. Replacement is simplified by an uncomplicated wall bracket which is included with each unit. The dispenser contains 500 enteric coated salt tablets.



This unit was designed for easy operation. With finger-tip pressure on the trigger, a tablet drops into the hand, and when the trigger is released, it automatically cocks, positioning a tablet for the next user. The dispenser is approximately 6 inches high and 3 inches wide, making it compact and attractive for the office as well as factory.

Weldiscope

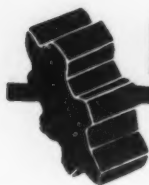
A new, specialized welding shield designed for getting into offset or close places is announced by Industrial Products Co., 2820 N. Fourth St., Philadelphia 33. The unit comprises a conventional type of fiber shield to which has been adapted a form of periscope, to make it practical for the welding operation. May be used for production welding in engine manufacturing, Ship building, filling holes in castings and on other types of machines and materials. For plant maintenance welding and commercial job welding it is an aid in performing better work, a time saver. The operator can see it as well as if it were a surface welding operation.



The Weldiscope is manufactured primarily of fiber over a reinforced periscope frame with close fitting face shield. Welding glass is on the inside where it is protected and is instantly turned out of the way of vision by means of a conveniently located trigger operated by the index finger of the same hand in which the shield is held. Welding glass automatically returns to welding position when trigger is released. Both inside and outside opening of shield is protected by a clear cover plate. A comfortable, offset fiber handle provides a secure grip and takes up minimum of space. Length, including the handle, 18 inches.

Liquid Hand Soap

Introduction of Whiz "Purr," a new liquid soap non-corrosive to copper or tin soap lines and dispensers, is announced by R. M. Hollingshead Corp., 840 Cooper St., Camden 2, N. J. The product is a coconut oil liquid hand soap with a small



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amount of tempering oils added to eliminate the sting of the coconut oil. A special inhibitor added to the soap makes it non-corrosive to copper or tin. The soap is prepared in both concentrated and ready-to-use solutions. The ready-to-use solution may be diluted with equal parts of water, if desired, to obtain a more economical washing solution.

The formula prevents clouding when diluted with hard water and also prevents the soap and water from precipitating after dilution. The concentrated form is packaged in 5 and 55 gallon drums. The ready-to-use form is packaged in 1, 5, 30 and 55-gallon drums.

Waste Receptacles

A new line of sanitary, all-steel waste receptacles is announced by Industrial Products Co., 2820 N. Fourth St., Philadelphia 33, Pa. Each receptacle is fitted with two, independent, silent, self-closing doors which are operated by a simple counterweight on the inside. Fitted with separate inner bag or metal container, either of which may be easily removed for disposing of contents.

Strongly made of heavy gauge furniture steel and finished in white or green baked enamel in range of sizes from 11½" x 11½" x 24¾" high to 21" x 21" x 46" high.

NEWS ITEMS

Dockson Corp., 2832 E. Grand Blvd., Detroit 11, Mich., announce the election of H. E. Piggott as president and general manager. Mr. Piggott has served Dockson Corp. for 27 years. Beginning as a shipping clerk in 1923, he has progressed steadily in the company as purchasing agent, sales, director of sales, to vice-president and general manager, from which he has been promoted to president.

Pyrene Manufacturing Co., 560 Belmont Ave., Newark, N. J., announces several new appointments in their sales personnel. Frederick W. Schnur of Sayville, L. I., has been named sales representative for the Long Island area. Mr. Schnur was formerly sales engineer for Merriman Brothers of Boston, manufacturers of marine equipment. During the war, he was a naval architect with the Miami Shipbuilding Corp. of Miami, Fla.

Ralph Krohn, Jr., has been appointed sales representative. A native of Houston, Texas, he was formerly sales engineer for Ware Laboratories, manufacturers of building products. During the war, he served 3½ years with the Navy as a chief warrant officer, and radio technician.

Henry Schneider, Jr., has been appointed sales representative to cover the Detroit area. He was formerly materials handling sales engineer for the Brown Darnell Co. of Detroit, and during the war he served

five years as chief pharmacist mate with the Navy.

Kenneth R. Shupp has also been appointed as sales representative to sell in parts of North Carolina and South Carolina, Virginia and West Virginia. Mr. Shupp was formerly an executive of Cannon Mills. Since the war he has been employed as manufacturer's agent. During the war, he served five years with the Navy. He holds the rank of Commander, Naval Air, USNR.

James A. Cowan has been transferred to Pittsburgh, Pa., as a direct factory representative for Macwhyte Company, wire rope manufacturers. His headquarters will be at the Pittsburgh Office in the Rea Building, 704 Second Avenue. Mr. Cowan has been with the Macwhyte Company for 13 years in various sales capacities. His territory will be in Pennsylvania and New York.

Louis F. Weyand of Detroit, vice president in charge of the Minnesota Mining &

Manufacturing Company's adhesives and coatings division, was elected to the firm's board of directors. A veteran of 35 years with the company, Mr. Weyand has held a number of sales supervisory posts, and was named general manager of the adhesives division in 1945. He was elected vice president of the firm in 1948. Headquarters of the company are in St. Paul. The adhesives plant and offices are in Detroit.

Donald Z. Mann has been appointed Eastern Division sales promotion representative of the Vul-Cork Sole Division of The Cambridge Rubber Co. Mr. Mann will also represent the Vul-Cork Sales Department in New England and the Middle West, working directly under E. T. Richardson, sales manager, making his headquarters at the Cambridge Taneytown, Maryland plant. Mr. Mann, a graduate of Gettysburg College School of Business Administration, has been Mr. Richardson's assistant since leaving the service, where he was corporal in the 85th Infantry Training Battalion at Camp Roberts, Calif.



"One Ounce of Safety," a sound motion picture promoting the importance of wearing safety shoes, has been produced by the Hy-Test Division of International Shoe Co., 1509 Washington Ave., St. Louis 3, Mo. Norman C. Whitsett, Hy-Test general manager, states the primary purpose in making this film available is to give plant safety directors a forceful "visual-tool" that can be used to impress upon workers the importance of protecting toes and feet with safety shoes. To assist safety directors in conducting meetings, a manual with

opening and closing remarks, projectionist's check-list and a suggested questionnaire for after meeting discussions will be supplied. In addition, a booklet emphasizing facts about safety shoes as presented in the film will be available for distribution to each worker attending the film showing.

The film points out that accidents are not always caused by carelessness and that the most careful workers can be injured seriously. The importance of proper fit is also pointed out. The film is available on request to Hy-Test Division.

TRADE PUBLICATIONS

in the Safety Field

These trade publications will help you to keep up-to-the-minute on new products and developments in industrial health and safety equipment. They are free and will be sent by manufacturers without obligation to readers of NATIONAL SAFETY NEWS who are responsible for this work. Send in the coupon below checked for the publications you desire. Please make your requests promptly.



1. "Safety Feeder": A 4-page circular describing a safety feeder device that produces a vacuum by passing compressed air through a venturi. Used to hand feed small parts into presses, the operator's hands never reach the danger area. F. J. Littell Machine Co.

2. "Aluminum Scaffolding": A brochure on heavy duty aluminum equipment that includes scaffold planks, stages, extension ladders, trestles, and step ladders. Safe, strong and long lasting, they will not break, check or splinter. Louisville Metal Products Co.

3. "Industrial Floor Maintenance": A booklet on a system of industrial floor maintenance that speeds up production. Contents cover dry scrubbing, shower-feed scrubbing, dust control, refinishing and maintaining of floors. Hild Floor Machine Co.

4. "Soap and Soap Equipment": A booklet that covers soap and soap equipment for industrial washrooms. Soaps for every requirement, apparatus, equipment, dispensers, paper towels and cabinets are described. West Disinfecting Co.

5. "How to Fight Fire": A booklet showing how to fight fire and protect property with carbon dioxide extinguishers. It also illustrates methods of fighting fire and the extinguishers for the hazards involved. Randolph Laboratories, Inc.

6. "4-Way Safety Plate": A booklet that shows the various answers to industry's need for a long-lasting safety flooring material. A tough steel floorplate with raised lug pattern provides traction for feet and wheels, permits drainage and easy maintenance. Inland Steel Co.

7. "Steel Scaffolds": A catalog folder on steel scaffolds, unit parts and accessories. It illustrates load tests of various parts and typical assemblies for interior and exterior use. Safway Steel Products, Inc.

8. "Color Dynamics in Industry": A booklet explaining how color dynamics in industry create better lighting, produce a visible effect of order, cleanliness and efficiency. It raises worker morale and helps to reduce accidents. Pittsburgh Plate Glass Co.

9. "Non-Skid Surface": Booklet showing how floors can be made slip-safe with easy-to-apply mineral-grain surface cleats. Used in shower rooms, kitchens, on catwalks and ramps, it gives traction where water, oil or other slippery substances are spilled. Minnesota Mining and Manufacturing Company.

10. "Safety Shoes": Catalog 15 lists safety shoes and boots in styles for almost every industrial need, including executive styles, women's moccasins, athletic type work shoes with oil resistant soles and medium weight work shoes. Lehigh Safety Shoe Co.

11. "Sling Chains": A booklet on the care, use and inspection of sling chains. It shows alloy steel chains, and the importance of such service and safety features as ductility, high strength, weight, hardness, link design and long life. Columbus McKinnon Chain Corp.

12. "Punch Press Devices": A manual showing how large and small manufacturers are utilizing punch press devices to help increase safety and improve production. It contains complete details, installation instructions and diagrams. Benjamin Electric Mfg. Co.

13. "Flammable Self-Checking Chart": Analyze hidden hazards on your property with this booklet that shows where hazards exist in most every department. The self-checking chart helps to check your plant and learn how to safeguard it. The Protectoseal Co.

14. "Steel Grating": Bulletin 2296 gives complete construction details, specifications, numerous possible applications and all the outstanding advantages of electro-forged steel grating and stair treads. Blaw-Knox Co.

15. "Fire Extinguishers": A brochure that shows 12 advanced engineering design features of a dry chemical fire extinguisher that gives greater effectiveness, more durability, easier maintenance, and greater dependability. Ansul Chemical Co.

16. "Elevators and Cranes": Bulletin 4951 on low-priced portable elevators available in models of 500, 1000 and 2000 lb. capacity, designed to meet a wide range of portable elevator requirements. It also presents entire line of elevators and portable cranes. Barrett-Cravens Company.

17. "Safety Belts": A folder on safety belts with a shock absorber of chemically treated nylon that stretches to several times its length. When a man falls, it becomes part of the life line and stretches, cushioning his fall. Rose Mfg. Co.

18. "Ventilating Hose": Catalog No. 30 illustrates hose for use in any industry. Lightweight, strong, flexible spiral wire reinforced hose, it is designed for dust collection, fume control and ventilation. American Ventilating Hose Co.

NATIONAL SAFETY NEWS

425 N. MICHIGAN AVE.
CHICAGO 11, ILLINOIS

JUNE, 1950

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